Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

serve
96
31 Fso

U. S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY

APR 23 1965

CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
OREGON

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE

and

OREGON STATE UNIVERSITY

and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above in cooperation with other Federal, State and private organizations.

AS OF
APR. 1, 1965

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Soil Conservation Service, 511 N.W. Broadway - Room 507, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	LOCATION	COOPERATING WITH
RIVER BASINS			
Western United States	Monthly (Feb.-May)	Portland, Oregon	All Cooperators
Basic Data Summary	October 1	Portland, Oregon	All Cooperators
STATES			
Alaska	Monthly (Mar.-May)	Palmer, Alaska	Alaska S.C.D.
Arizona	Semi-Monthly (Jan. 15 - Apr. 1)	Phoenix, Arizona	Salt R. Valley Water Users Assoc. Ariz. Agr. Exp. Station
Colorado and New Mexico	Monthly (Feb.-May)	Fort Collins, Colorado	Colo. State University Colo. State Engineer N. Mex. State Engineer
Idaho	Monthly (Jan.-June)	Boise, Idaho	Idaho State Reclamation Engineer
Montana	Monthly (Jan.-June)	Bozeman, Montana	Mont. Agr. Exp. Station
Nevada	Monthly (Jan.-May)	Reno, Nevada	Nevada Dept. of Conservation and Natural Resources - Division of Water Resources
Oregon	Monthly (Jan.-June)	Portland, Oregon	Oreg. State University Oregon State Engineer
Utah	Monthly (Jan.-June)	Salt Lake City, Utah	Utah State Engineer
Washington	Monthly (Feb.-June)	Spokane, Washington	Wn. State Dept. of Conservation
Wyoming	Monthly (Feb.-June)	Casper, Wyoming	Wyoming State Engineer

PUBLISHED BY OTHER AGENCIES

REPORTS	ISSUED	AGENCY
British Columbia	Monthly (Feb.-June)	Water Resources Service, Dept. of Lands, Forest and Water Resources, Parliament Bldg., Victoria, B.C., Canada
California	Monthly (Feb.-May)	Calif. Dept. of Water Resources, P.O. Box 388, Sacramento, Calif.

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
OREGON

ISSUED

APRIL 8, 1965

Report prepared by

W. T. FROST, Snow Survey Supervisor

and

BOB L. WHALEY, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

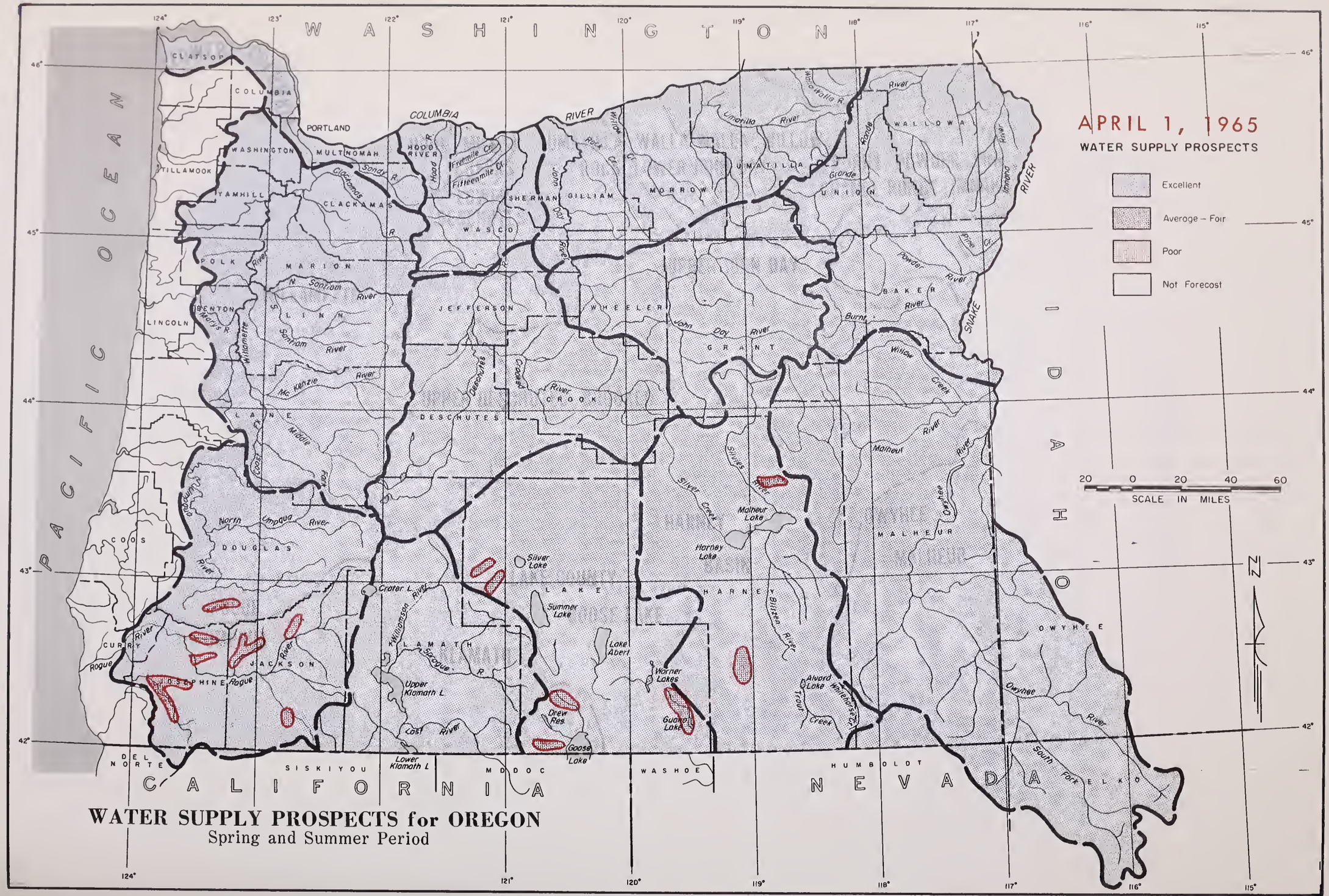
Issued by

A. J. WEBBER
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE

F. EARL PRICE
DIRECTOR
OREGON AGRICULTURAL
EXPERIMENT STATION

CHRIS L. WHEELER
STATE ENGINEER
STATE OF OREGON

TABLE OF CONTENTS



WATER SUPPLY PROSPECTS for OREGON

Spring and Summer Period

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

7-0-19102-1-L

WATER SUPPLY OUTLOOK for OREGON

APRIL 1, 1965

Oregon water users will have average to excellent water supplies in 1965, April through September, despite nearly two months of severe drought preceded by two record-breaking early winter floods. Mountain snowpacks are highly variable in water content but they all lie on watershed soils that are very nearly saturated. Stored water supplies are up to a high of 82 percent of capacity.

SNOW COVER

Two months of severe drought have prevented normal accumulation of snow in the mountains. However, remnants of the hugh snowpack, which accumulated in December and January immediately following the destructive floods, contain sufficient amounts of water for near average streamflow.

Water in the snowpack varies from 63 percent of the 1948-62 average in Lake county on up to 126 percent average in the Blue and Wallowa mountains.

SOIL MOISTURE

Watershed soils underlying the snowpack are very heavily wetted - actually approaching the saturation point in many areas. Spring runoff from the snowmelt or rainfall will be greatly favored by these wet soils. Valley soils have lost surface moisture as a result of two dry months.

RESERVOIR STORAGE

Total water stored in 25 Oregon reservoirs is now 132 percent of the 15 year (1948-62) average and 151 percent of last year on this date. Many of these reservoirs will fill before heavy use of stored water will begin.

STREAMFLOW

Because of drought conditions, flow of key Oregon streams* during March has fallen considerably below average as follows: Owyhee, 79 percent; Umatilla River, 52 percent; John Day River, 83 percent; Middle Fork Willamette, 58 percent; Umpqua River, 39 percent and Rogue River, 70 percent. Only on the Deschutes and Klamath Lake have streamflows remained near normal with 100 and 107 percent respectively.

Forecasts of expected streamflow in the April through September period, compared with the 15 year average (1948-62), are mostly near the average. Low forecasts at about 80 to 83 percent average are for inflow to Gerber and Clear Lake reservoirs in Klamath Basin. Highest percentages are the main John Day River at Prairie City and the Imnaha River in Wallowa county, both forecast to flow 125 percent of the average.

continued on next page --

continued --

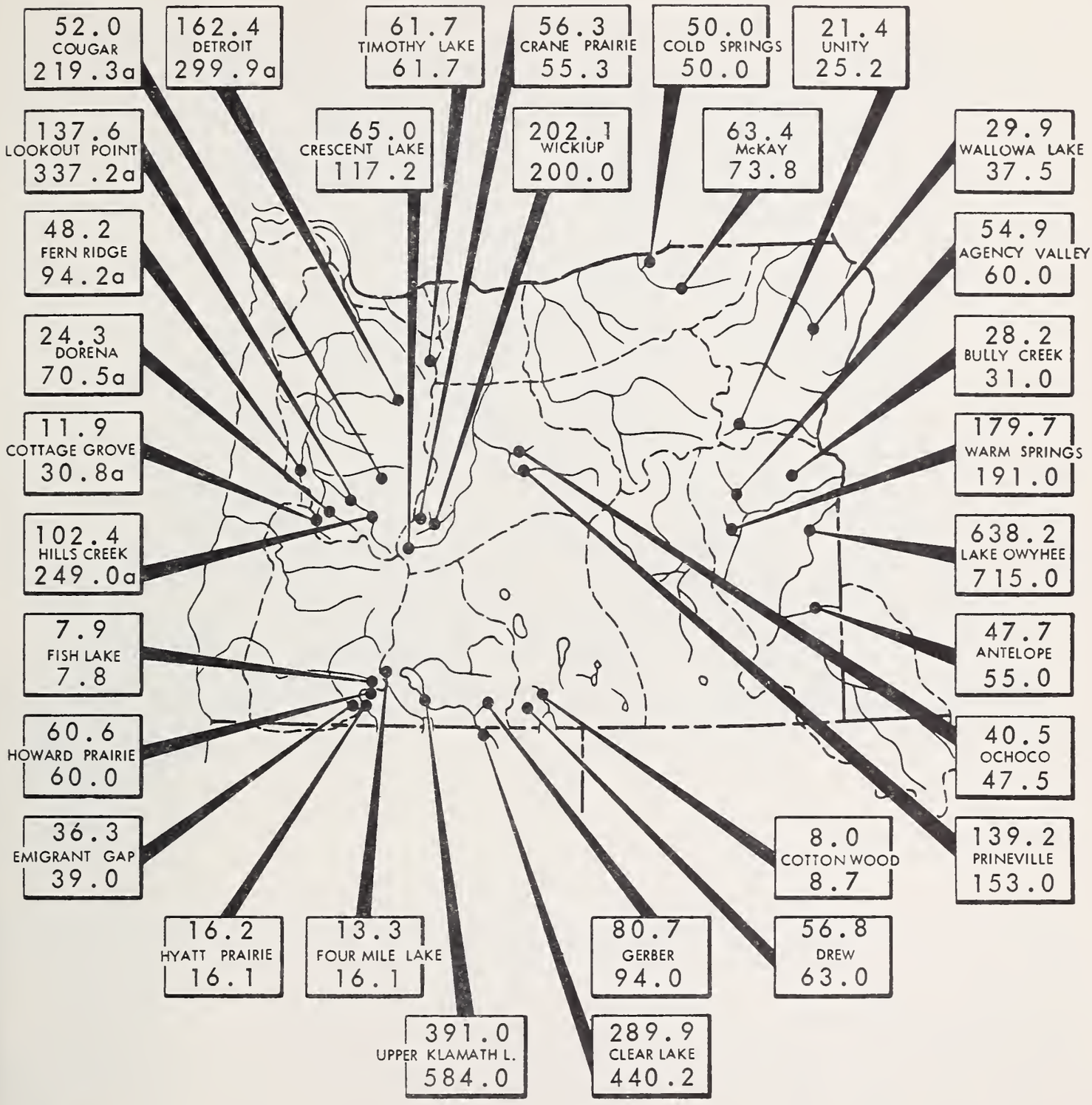
Flow of many small streams with watersheds of low elevation will be tapering off a week or so earlier than usual due to the loss of low and mediam elevation snow.

All forecasts are made on the assumption that average conditions of temperature and precipitation will prevail during the runoff season.

* Preliminary data furnished by U. S. Geological Survey, Current Records Center, Portland and by many other co-operators.

STORAGE STATUS of OREGON RESERVOIRS
usable contents in thousands of acre feet

APRIL 1, 1965



EXPLANATION

687.0
LAKE OWYHEE
715.0

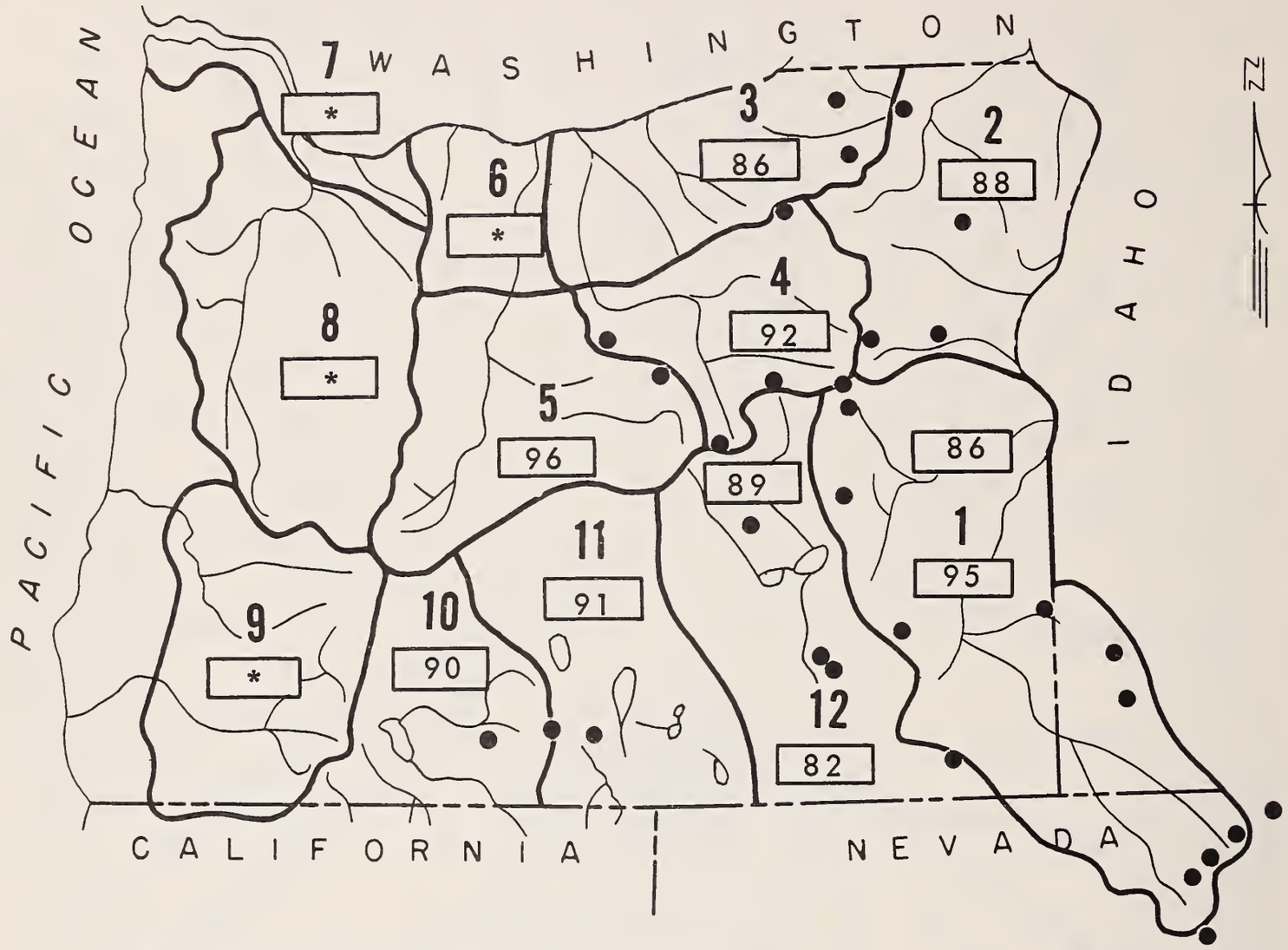
---Contents

---Capacity

(a) Multiple purpose reservoir - space reserved for flood runoff.
N. R. - No report.

MOUNTAIN SOIL MOISTURE in OREGON
as percent of capacity

APRIL 1, 1965



● Soil Moisture Station

**Moisture studies not yet developed in these areas.*

VALLEY PRECIPITATION in OREGON [a]

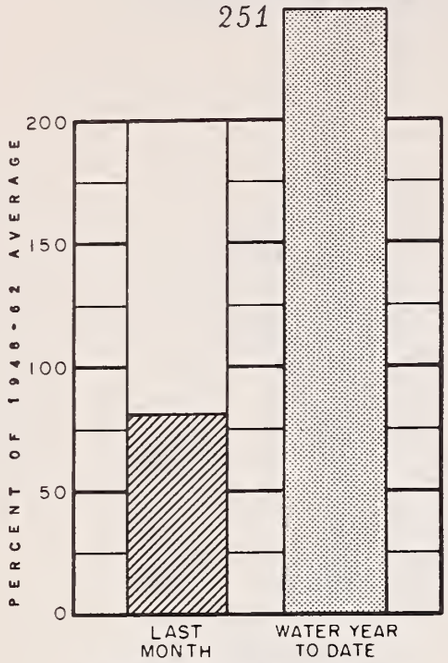
APRIL 1, 1965

PRECIPITATION as PERCENT of the 1948-62 AVERAGE					
STATION	LAST MONTH	WATER YEAR TO DATE [b]	STATION	LAST MONTH	WATER YEAR TO DATE [b]
Baker Apt.	85	131	Lakeview	16	152
Bend	1	153	Meacham	25	137
Burns	16	140	Medford Apt.	21	149
Enterprise	36	127	Nyssa	24	113
Eugene Apt.	16	126	Pendleton Apt.	24	118
Heppner	71	124	Portland Apt.	27	95
John Day	99	129	Salem Apt.	18	94
Klamath Falls Apt.	6	131	The Dalles	93	140
			Owyhee (Nev.)	35	116

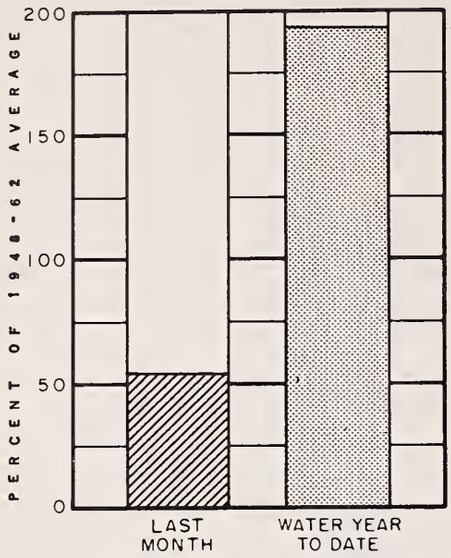
(a) Preliminary data furnished by the U.S. Weather Bureau. (b) Oct. 1 to date. (c) Report delayed.

CURRENT OREGON STREAMFLOW

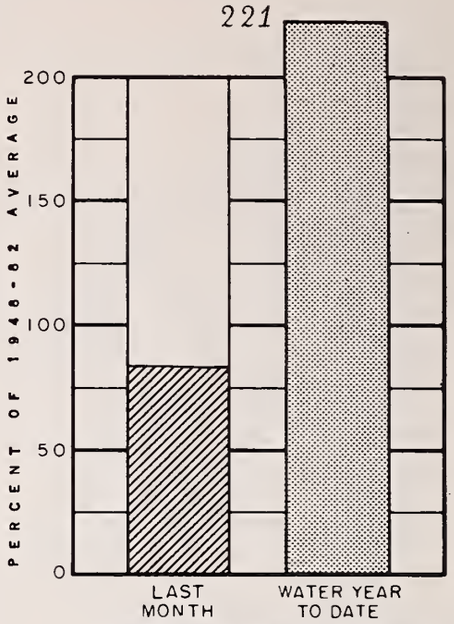
APRIL 1, 1965



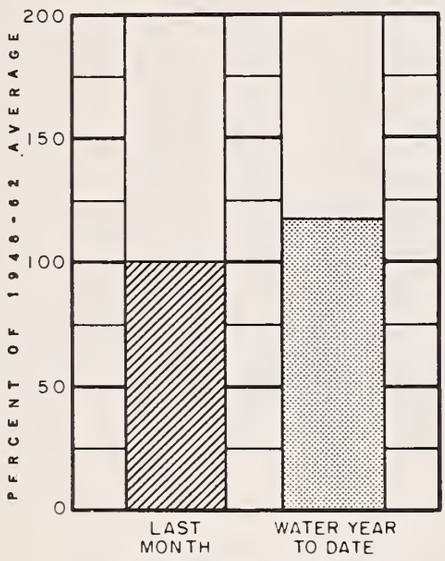
Owyhee Lake net inflow



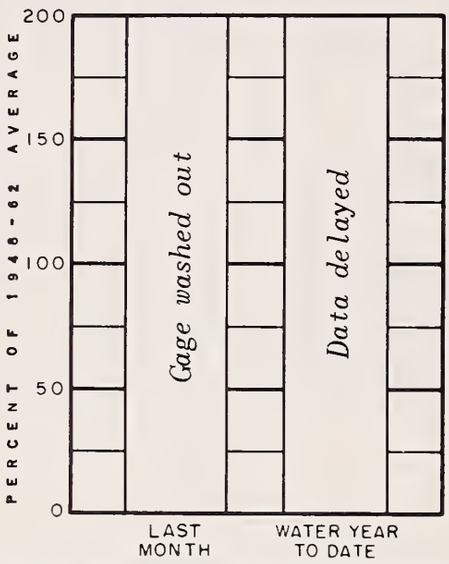
Umatilla near Umatilla



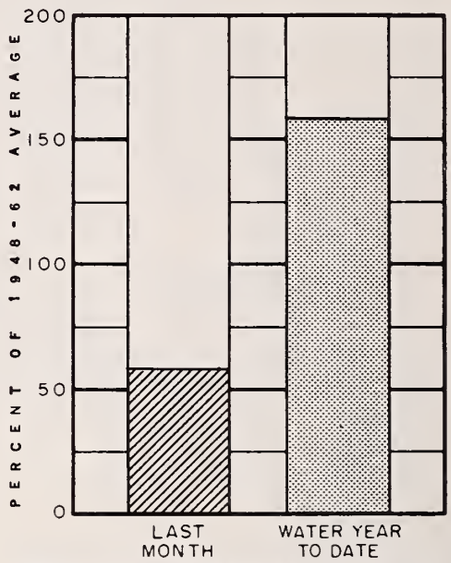
John Day at Service Creek



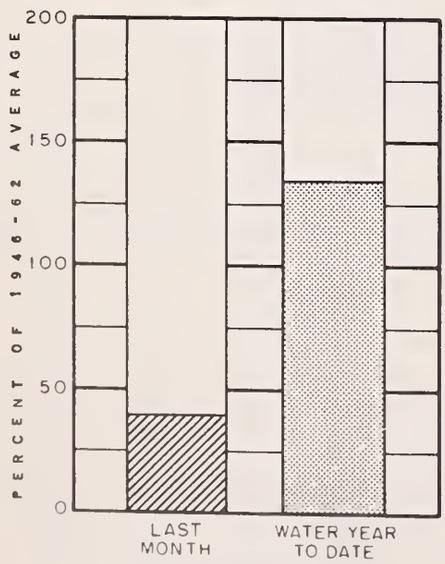
Deschutes at Moody



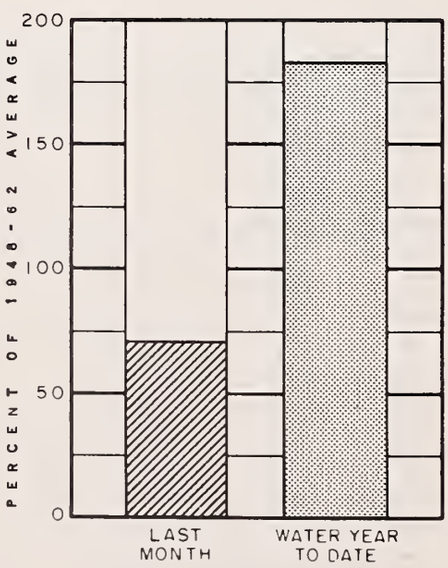
Hood and conduit near Hood River



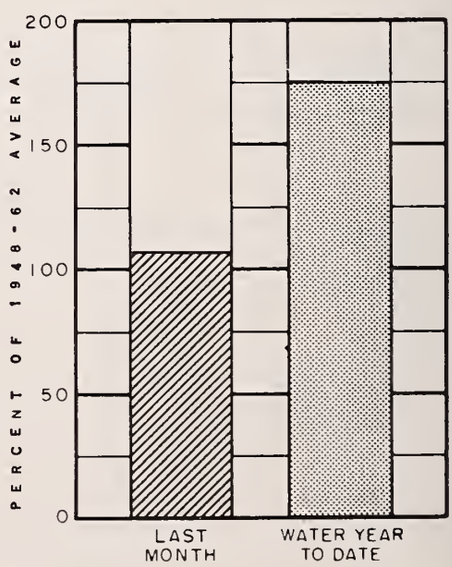
Mid. Fk. Willamette below No. Fk.



Umpqua near Elkton



Rogue at Raygold



Upper Klamath Lake net inflow

Data furnished by U.S. Geological Survey; The Pacific Power and Light Co.; and North and South Boards of Control Owyhee Project.

WATER SUPPLY OUTLOOK
OWYHEE, MALHEUR WATERSHEDS
OREGON

as of
APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Farmers and ranchers in Malheur county will have excellent to average irrigation water supplies in 1965 despite two months of record-breaking drought which followed severe early winter floods. Mountain snowpacks are adequate and lie on nearly saturated soils which will favor runoff. Stored water supplies are excellent.

SNOW COVER

Heavy January storms quickly replaced all the snow cover lost during the early winter floods and snow continued to pile up into early February. Two months of drought then reduced this massive snowpack, especially at the lower elevations, to present conditions. Water content of the snow is now 98 percent average on the Owyhee and 120 percent average on the Malheur.

SOIL MOISTURE

Watershed soils under the snowpack are very wet - 95 percent of capacity on the Owyhee and 86 percent on the Malheur.

RESERVOIR STORAGE

Lake Owyhee spill gates have been closed and the lake now holds 638,200 acre feet compared with 349,400 acre feet one year ago. There will be more than enough inflow to fill the remaining space this year for the Owyhee Project. Antelope Reservoir held 47,700 acre feet on April first compared with 10,100 one year ago. This is an excellent water supply for Jordan Valley Irrigation District.

Warmsprings, Agency Valley and Bully Creek reservoirs held a total of 262,800 a.f. on the first of April compared with 115,900 acre feet one year ago. This is an excellent supply for the Warmsprings and Vale Oregon Irrigation Districts.

STREAMFLOW

Inflow to Lake Owyhee* was 79 percent average during March but total inflow from October 1 through March 31 has been 251 percent average.

Forecast for inflow to Lake Owyhee, April through September, is 400,000 acre feet or 105 percent of the 15 year average (1948-62).

Flow of Jordan Creek is forecast at 100,000 acre feet or 102 percent average.

Forecasts on the Malheur River at Drewsey and North Fork at Beulah indicate expected flows of 90,000 acre feet (110 percent average) on the former and 75,000 acre feet (115 percent) on the latter.

All forecasts are made on the assumption that normal conditions of temperature and precipitation prevail during the runoff period.

,* Preliminary data from North Board of Control, Nyssa, Oregon.

Report prepared by
W.T. FROST AND BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Boulder Creek	Average	Average
Bully Creek	Average	Average
Cow Creek	Average	Average
Jordan Creek	Average	Average
Jordan Valley Irrig. Dist.	Excellent	Average
McDermitt Creek	Average	Average
Oregon Canyon Creek	Average	Average
Owyhee Project	Excellent	Excellent
Succor Creek	Average	Average
Tenmile Creek	Average	Average
Vale-Oregon Irrig. Dist.	Excellent	Excellent
Warmsprings Irrig. Dist.	Excellent	Excellent
Willow Creek (Reservoired)	Excellent	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1965

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Agency Valley	60.0	54.9	31.7	41.4
Antelope	55.0	47.7	10.1	19.6 [m]
Bully Creek	31.0	28.2	11.8	- -
Owyhee	715.0	638.2	349.4	483.4
Warmsprings	191.0	179.7	72.4	99.1

STREAMFLOW FORECASTS [a] (1,000 Ac. Ft.) as of April 1, 1965

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE [i]
NO.	NAME				
1780	Jordan Creek above Lone Tree Creek	100	April-July	98	102
2140	Malheur near Drewsey	88	April-July	80	111
		90	April-Sept.	82	110
2175	Malheur, No. Fk. at Beulah [d]	68	April-July	59	116
		75	April-Sept.	65	115
1825	Owyhee Reservoir net Inflow [k]	386	April-July	364	106
		400	April-Sept.	381	105

SOIL MOISTURE

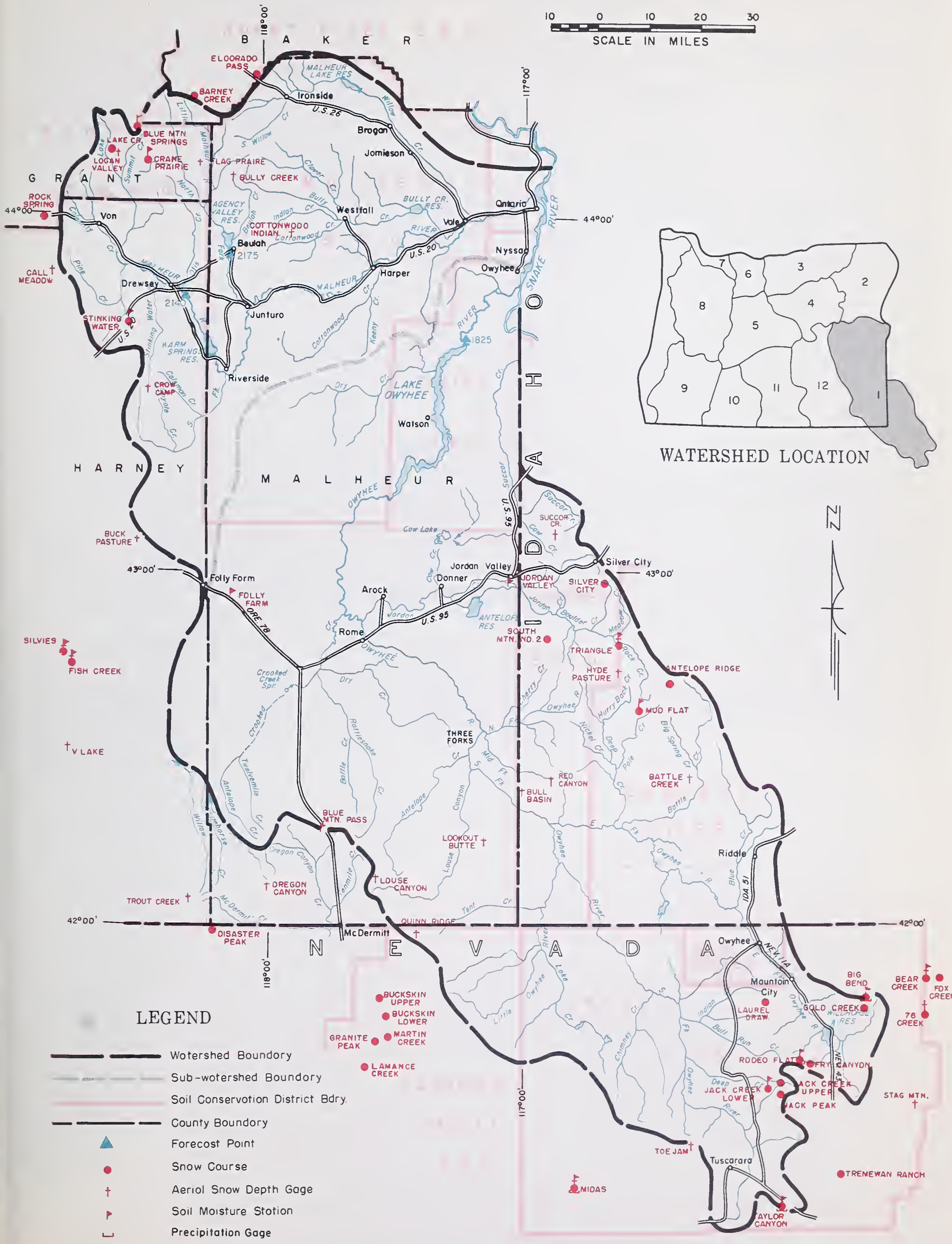
STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Bear Creek (Nev.)	7800	72	16.8	3-29-65	14.5	12.0	11.3
Big Bend (Nev.)	6700	48	16.7	3-29-65	16.4	15.7	15.5
Blue Mountain Springs	5900	42	16.9	3-29-65	12.3	7.9	13.5
Crane Prairie	5375	48	18.2	3-26-65	17.9	14.9	16.3
Folly Farm	4450	30	12.5	c			
Jack Creek, Lower (Nev.)	6800	48	8.6	3-30-65	8.3	8.2	8.1
Jordan Valley	4390	48	19.3	c			
Mud Flat (Ida.)	5500	48	12.8	3-26-65	12.0	9.5	11.0 [f]
Rodeo Flat (Nev.)	6800	42	11.0	3-29-65	10.9		
Stinking Water Summit	4800	48	21.9	b			
Taylor Canyon	6200	48	15.1	3-30-65	15.0 [f]	9.0	12.4 [f]
Triangle (Ida.)	5150	48	16.6	2-26-65	15.9 [f]	13.5	14.0 [f]

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches) LAST YEAR	WATER CONTENT (Inches) 1948-62 AVERAGE
Antelope Ridge (Ida.)	5900	3/26	8	2.9	10.9	- -
Barney Creek	5950	3/29	34	12.6	8.8	8.7
Battle Creek [e] (Ida.)	5700	3/29	0	0.0	8.1	2.3 [m]
Bear Creek (Nev.)	7800	3/29	72	25.7	19.8	21.0
Big Bend (Nev.)	6700	3/29	28	8.2	10.4	10.7
Blue Mountain Springs	5900	3/29	61	22.2	14.5	17.3
Buck Pasture [e]	5700	3/29	0	0.0	9.6	- -
Buckskin, Lower (Nev.)	6700	3/30	15	5.9	10.6	9.2 [h]
Buckskin, Upper (Nev.)	7200	3/30	21	7.6	10.4	10.3 [h]
Bull Basin [e] (Ida.)	5600	3/29	0	0.0	1.8	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.

OWYHEE, MALHEUR WATERSHEDS



SNOW

SNOW COURSE NAME	ELEVATION	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	PAST RECORD: WATER CONTENT (Inches) LAST YEAR	1948-62 AVERAGE
Bully Creek [e]	5300	3/29	0	0.0	3.3	- -
Call Meadow [e]	5340	3/29	6	2.3	5.9	- -
Columbia Basin [e] (Nev.)	6650	3/30	14	4.8	8.4	- -
Cottonwood-Indian [e]	4320	3/29	0	0.0	1.3	- -
Crane Prairie	5375	3/26	37	13.9	12.5	10.9
Crow Camp [e]	5500	3/29	0	0.0	4.0	- -
Disaster Peak (Nev.)	6500	3/29	21	8.9	11.7	11.7 [h]
Eldorado Pass	4600	4/1	0	0.0	5.1	0.6 [h]
Fawn Creek [e] (Nev.)	7000	3/30	0	0.0	- -	- -
Fish Creek	7900	3/30 [j]	79	35.8	28.0	26.9
Flag Prairie [e]	4750	3/29	3	1.1	7.9	- -
Fox Creek (Nev.)	6800	3/29	32	10.7	12.6	10.9
Fry Canyon (Nev.)	6700	3/29	15	5.0	6.9	8.9
Gold Creek (Nev.)	6600	3/29	13	4.1	8.5	6.5
Granite Peak (Nev.)	7800	3/30	50	18.8	9.7	12.5 [h]
Hyde Pasture [e] (Ida.)	5800	3/29	3	1.2	8.4	- -
Jack Creek, Lower (Nev.)	6800	3/30	8	3.0	5.8	3.5
Jack Creek, Upper (Nev.)	7250	3/30	27	9.8	10.7	11.6
Jacks Peak (Nev.)	8420	3/30	90	34.6	24.8	27.5 [h]
Lake Creek	5120	3/26	37	13.5	12.5	11.2
Logan Valley [e]	5100	3/29	22	7.9	9.2	- -
Lookout Butte [e]	5650	3/29	0	0.0	0.0	- -
Louse Canyon [e]	6440	3/29	2	0.8	3.3	- -
Martin Creek (Nev.)	6700	3/30	21	10.0	10.2	8.8 [h]
Merritt Mountain [e] (Nev.)	7000	3/30	18	6.0	- -	- -
Midas (Nev.)	7200	3/31	0	0.0	0.6	1.9 [h]
Mud Flat (Ida.)	5500	3/26	13	4.7	9.2	4.5
Oregon Canyon [e]	6950	3/29	3	1.2	4.5	- -
Quinn Ridge [e] (Nev.)	6300	3/29	1	0.4	2.1	- -
Red Canyon [e] (Ida.)	6500	3/29	10	4.0	8.7	- -
Rock Spring	5100	3/27	10	3.5	5.8	5.2
Rodeo Flat (Nev.)	6800	3/29	11	3.7	6.2	8.2
76 Creek (Nev.)	7100	3/29	35	12.2	11.4	14.5 [h]
Silver City [e] (Ida.)	6400	3/29	48	19.7	17.0	16.3 [h]
Silvies	6900	3/30	33	12.3	15.3	14.0
South Mountain #2 (Ida.)	6340	3/30	29	12.5	13.4	13.2 [h]
Stinking Water	4800	[b]				
Succor Creek [e] (Ida.)	6100	3/29	12	4.8	9.6	- -
Taylor Canyon (Nev.)	6200	3/30	T	T	6.7	3.7
Toe Jam [e] (Nev.)	7700	3/30	18	6.0	9.6	- -
Tremewan Ranch (Nev.)	5700	3/29	0	0.0	T	0.7
Triangle [e] (Ida.)	5150	3/29	0	0.0	1.8	- -
Trout Creek [e]	7800	3/29	22	8.8	7.2	- -
"V" Lake [e]	6600	3/29	6	2.4	7.2	- -

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS
OREGON

as of
APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Water users in Baker, Union and Wallowa counties will have average to excellent water supplies in 1965 despite two early winter flood periods followed by two months of severe drought.

SNOW COVER

Water content of the mountain snowpack on April first is greater than the 1948-62 average. On the Burnt River it is 119 percent; on the Powder, 126 percent; on the Wallowa, 125 percent, and on the Grande Ronde, 126 percent.

SOIL MOISTURE

Watershed soils under the snowpack are very wet and will greatly favor runoff from melting snow and rainfall. Average moisture at three soil sites is 88 percent of the total capacity.

RESERVOIR STORAGE

Total water stored in reservoirs is exceptionally good. Wallowa Lake contains 29,900 acre feet compared with 22,700 a.f. last year. Unity Reservoir contains 21,444 acre feet compared with 13,700 a.f. last year.

STREAMFLOW

Forecasts of streamflow for the April through September period are all well above the 1948-62 average flows and are as follows:

Burnt River near Hereford	50,000 a.f.	117 percent average
Powder River near Baker	80,000 a.f.	119 percent average
Imnaha River at Imnaha	398,000 a.f.	125 percent average
East Fork Wallowa near Joseph	13,500 a.f.	112 percent average
Hurricane Creek near Joseph	53,000 a.f.	110 percent average
Lostine River near Lostine	150,000 a.f.	114 percent average
Bear Creek near Wallowa	80,000 a.f.	111 percent average

All of these forecasts have been reduced, some as much as 20 percent, due to drought conditions. These forecasts are made on the assumption of normal conditions of temperature and rainfall during the runoff period.

Report prepared by
W.T. FROST AND BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Alder Slope	Excellent	Average
Baker Valley	Excellent	Average
Big Creek	Excellent	Average
Clover Cr. (nr. N. Powder)	Excellent	Average
Cove	Excellent	Average
Durkee	Excellent	Average
Eagle Valley	Excellent	Average
Elgin	Excellent	Average
Enterprise-Joseph	Excellent	Excellent
Hereford-Bridgeport	Excellent	Excellent
Imnaha River	Excellent	Average
La Grande-Island City	Excellent	Average
Lostine-Wallowa	Excellent	Average
No. Powder River-Wolf Cr.	Excellent	Average
Pine Valley	Excellent	Average
Powder River-Elk Creek	Excellent	Average
Summerville	Excellent	Average
Sumpter Valley	Excellent	Average
Union-Hot Lake	Excellent	Average
Unity	Excellent	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1965

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Unity	25.2	21.4	13.7	14.1
Wallowa Lake	37.5	29.9	22.7	18.2

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1965

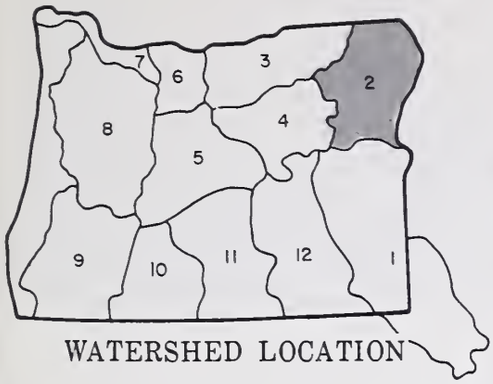
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
3305	Bear near Wallowa	80	April-Sept.	72	111
2730	Burnt near Hereford[d]	46	April-June	39	118
		50	April-Sept.	41	117
3200	Catherine near Union	83	April-Sept.	73	114
3190	Grande Ronde at LaGrande	228	April-July	200	114
		231	April-Sept.	203	114
3295	Hurricane near Joseph	53	April-Sept.	48	110
2920	Imnaha at Imnaha	398	April-Sept.	318	125
3300	Lostine near Lostine	150	April-Sept.	131	114
2755	Powder near Baker	78	April-July	66	118
		80	April-Sept.	67	119
3250	Wallowa, East Fork near Joseph[d]	11.0	April-July	9.7	113
		13.5	April-Sept.	12.0	112

SOIL MOISTURE

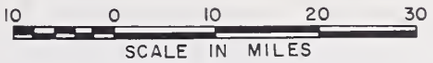
STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Blue Mountain Summit	5100	36	16.8	3-30-65	15.6	9.7	13.4
Emigrant Springs	3925	48	22.3	3-28-65	20.9	21.8	20.7
Tollgate	5070	48	23.6	3-29-65	18.9	19.0	21.3

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS



WATERSHED LOCATION



LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Soil Moisture Station
- Aerial Snow Depth Gage
- Precipitation Gage

SNOW

SNOW COURSE NAME	ELEVATION	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (Inches)	CURRENT INFORMATION: WATER CONTENT (Inches)	PAST RECORD: WATER CONTENT (Inches) LAST YEAR	PAST RECORD: WATER CONTENT (Inches) 1948-62 AVERAGE
Aneroid Lake #1	7480	3/29	123	50.2	30.8	38.9*
Aneroid Lake #2	7300	3/29	108	45.6	31.0	34.6*
Anthony Lake	7125	3/29	103	41.1	28.8	28.9
Bald Mountain [e] (Ore.)	6700	3/29	69	27.6	30.1	- -
Barney Creek	5950	3/29	34	12.6	8.8	8.7
Beaver Reservoir	6340	3/27	44	13.0	13.5	12.8
Big Sheep [e]	6200	3/30	84	35.3	22.0	- -
Blue Mountain Summit	5098	3/30	31	10.5	10.5	8.6
Bourne	5800	3/25	50	19.9	17.7	16.3
Clover Creek	4100	[b]				
County Line	4800	3/31	21	7.4	8.1	7.6
Dooley Mountain	5430	3/29	32	11.7	9.5	9.3
Eilertson Meadows	5400	3/26	43	17.0	14.4	12.2
Eldorado Pass	4600	4/1	0	0.0	5.1	0.6 [h]
Gold Center	5340	3/25	36	14.9	12.9	13.7
Goodrich Lake	6775	Report	delayed			
Intake House	4930	3/26	46	13.8	- -	- -
Little Alps	6200	3/29	61	21.6	15.5	- -
Little Antone	5000	3/29	18	6.8	* *	* *
Lucky Strike	5050	3/26	65	19.5	14.1	14.6 [h]
Meacham	4300	3/29	34	13.1	16.9	9.5
Mirror Lake [e]	8200	3/29	211	97.1	71.4	- -
Moss Spring	5850	3/29	82	30.2	27.5	26.2*
Power Plant	3990	3/26	20	6.4	- -	- -
Schneider Meadows	5400	4/2 [j]	79	33.5	31.8	32.4
Schoolmarm	4775	3/31	13	4.8	7.6	5.2 [h]
Standley	7400	3/29	78	31.0	37.1	- -
Taylor Green	5740	3/29	57	20.0	16.6	18.8*
Tipton	5100	3/30	34	12.0	12.5	11.0 [h]
Tollgate	5070	3/29	70	26.9	39.0	29.9
TV Ridge	7000	3/29	69	28.0	***	***

*Snow course shortened--averages revised.
**New station--no previous data.
***Station moved--old data not comparable.

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS
OREGON

as of

APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Water users in Umatilla, Morrow and Gilliam counties will have excellent to average water supplies in 1965 despite two months of severe drought, which followed two record-breaking early winter floods. The mountain snowpacks are near average and lie on watershed soils that are well wetted. Stored water supplies are excellent.

SNOW COVER

Water content of the mountain snowpack is 90 percent of the 15 year average (1948-62) on the Walla Walla, 104 percent on the Umatilla; 119 percent on McKay Creek and 125 percent on the Birch-Butter-Willow creek watersheds. There is less snow than last year at all stations except at Arbuckle Mountain and Lucky Strike snow courses.

SOIL MOISTURE

Watershed soils are still very wet under the snowpack but are drying rapidly on the surface elsewhere.

RESERVOIR STORAGE

McKay Reservoir now contains 63,380 acre feet compared with 22,100 a.f. one year ago on this date.

Coldsprings Reservoir is full with slightly more than 50,000 acre feet which is the same figure as last year at this time.

STREAMFLOW

Flow of the Umatilla near Umatilla* was about half average in March but has been 191 percent average from October 1 through March 31.

Forecasts of flow for the six month season, April through September, are all close to average with the lowest forecast for the South Fork of the Walla Walla River where 70,000 acre feet are expected for 92 percent of the 15 year (1948-62) average.

Report prepared by
W.T. FROST AND BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

Flow of the Umatilla River at Pendleton is forecast at 190,000 acre feet or 104 percent of the average. McKay Creek discharge into the reservoir is estimated to be 35,000 acre feet or 109 percent average.

Butter Creek is forecast to flow 10,300 acre feet or 105 percent average for the period April through July.

These forecasts are made on the assumption that average conditions of temperature and precipitation will prevail during the runoff period.

* Preliminary data furnished by U. S. Geological Survey, Portland, Oregon.

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Birch Creek	Excellent	Average
Butter Creek	Excellent	Average
Dry Creek	Average	Average
Dugger Creek	Average	Average
Johnson Creek	Average	Average
McKay Creek	Excellent	Average
Mill Creek	Average	Average
Mud Creek	Average	Average
Pine Creek	Average	Average
Rhea Creek	Excellent	Average
Rock Creek	Excellent	Average
Umatilla R. (Cold Springs Reservoir)	Excellent	Average
Umatilla River, Main	Average	Average
Umatilla River (McKay Res.)	Excellent	Average
Walla Walla River, Little	Average	Average
Walla Walla River, Main	Average	Average
Walla Walla River, No. Fk.	Average	Average
Walla Walla River, So. Fk.	Average	Average
Willow Creek	Excellent	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1965

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cold Springs Camp	50.0	50.0	50.0	48.1
McKay	73.8	63.4	22.1	54.0

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1965

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
0320	Butter Creek near Pine City	10.3	April-July	9.8	105
0225	McKay near Pilot Rock	35	April-July	32	109
		35	April-Sept.	32	109
0200	Umatilla near Gibbon	98	April-Sept.	93	105
0210	Umatilla at Pendleton	187	April-July	178	105
		190	April-Sept.	183	104
0100	Walla Walla, South Fork near Milton	58	April-July	62	93
		70	April-Sept.	76	92

SOIL MOISTURE

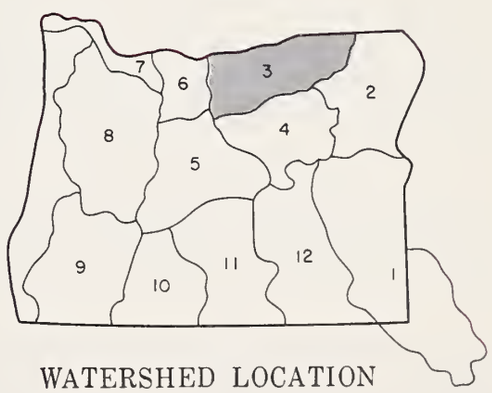
STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Athena-Weston	1700	48	18.7	3-29-65	14.0	13.8	14.9
Battle Mountain Summit	4340	48	13.8	3-29-65	13.8	13.1	13.4
Emigrant Springs	3925	48	22.3	3-28-65	20.9	21.8	20.7
Tollgate	5070	48	23.6	3-29-65	18.9	19.0	21.3

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

LEGEND

- Watershed Baundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Baundary
- Forecast Paint
- Snaw Caurse
- Soil Maisture Statian



WATERSHED LOCATION

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Arbuckle Mountain	5400	3/29	41	15.0	13.7	12.7
Battle Mountain Summit	4340	3/29	9	2.4	4.0	2.2 [m]
Blue Mountain Camp	4300	3/29	36	14.2	27.8	- -
Emigrant Springs	3925	3/29	7	2.2	11.8	5.1
Lucky Strike	5050	3/26	65	19.5	14.1	14.6 [h]
Meacham	4300	3/29	34	13.1	16.9	9.5
Tollgate	5070	3/29	70	26.9	39.0	29.9
Weston Mountain	2700	3/29	0	0.0	0.0	- -

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
UPPER JOHN DAY WATERSHEDS
OREGON

as of
APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Water users in Grant and Wheeler counties will have average to excellent water supplies in 1965 despite two record-breaking early winter floods followed by two months of severe drought.

SNOW COVER

Water content of the mountain snowpack, measured at 20 snow courses on the John Day watershed, averages 119 percent of the 15 year (1948-62) normal for April first and 121 percent of last year, same date.

SOIL MOISTURE

Moisture in the soil mantle under the snowpack continues to be very wet and is near the saturation point with records from six soil sites averaging 92 percent of total moisture capacity. These wet soils will favor runoff from melting snow and precipitation.

STREAMFLOW

Flow of the John Day River at Service Creek* was 83 percent average (1948-62) in March and totals 221 percent average in the period October 1 through March 31. The affect of the drought was indicated in the flow dropping to 37 percent average during the last week of the month.

Forecasts of streamflow in the six month period April through September have averaged a 25 percent drop because of the two month drought just experienced. Following are the current forecasts compared with the 15 year (1948-62) average flows:

Strawberry Creek	10,100 a.f.	115 percent average
John Day River at Prairie City	64,000 a.f.	125 percent average
John Day Middle Fork at Ritter	160,000 a.f.	122 percent average

These flows, if obtained, should be very similar to those experienced in the April-September period of 1958. Greater flows could result only from an unusual combination of very heavy rainfall and warm temperatures.

* Preliminary data furnished by U. S. Geological Survey, Portland, Oregon.

Report prepared by
W.T. FROST AND BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Beech Creek	Excellent	Average
Beech Creek-Fox-Long Cr.	Excellent	Average
Bridge-Mountain Creeks	Excellent	Average
Camas Creek	Excellent	Average
Indian-Pine Creeks	Excellent	Average
John Day River, Main Fork	Excellent	Average
John Day River, Mid. Fork	Excellent	Average
John Day River, N. Fork	Excellent	Average
John Day River, S. Fork	Excellent	Average
Monument-Kimberly	Excellent	Average
Strawberry Creek	Excellent	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1965

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1965

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
0385	John Day at Prairie City	58	April-July	46	126
		64	April-Sept.	51	125
0440	John Day, Middle Fork at Ritter	156	April-July	127	123
		160	April-Sept.	131	122
0375	Strawberry near Prairie City	9.4	April-July	8.1	116
		10.1	April-Sept.	8.8	115

SOIL MOISTURE

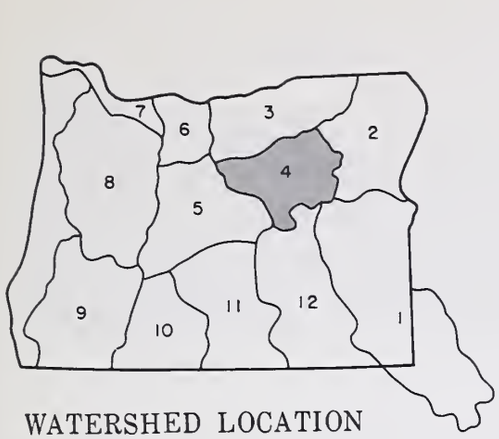
STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Battle Mountain Summit	4340	48	13.8	3-29-65	13.8	13.1	13.4
Blue Mountain Springs	5900	42	16.9	3-29-65	12.3	7.9	13.5
Blue Mountain Summit	5100	36	16.8	3-30-65	15.6	9.7	13.4
Derr	5670	24	9.0	[b]			
Marks Creek	4540	36	14.1	3-26-65	13.6	9.3	13.8
Snow Mountain	6300	48	16.7	3-29-65	15.9	12.4	14.9
Starr Ridge	5150	36	10.6	3-29-65	10.4	8.5	10.5

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
					LAST YEAR	1948-62 AVERAGE
Anthony Lake	7125	3/29	103	41.1	28.8	28.9
Arbuckle Mountain	5400	3/29	41	15.0	13.7	12.7
Battle Mountain Summit	4340	3/29	9	2.4	4.0	2.2[m]
Beech Creek Summit	4800	3/29	9	3.4	4.8	4.6
Blue Mountain Springs	5900	3/29	61	22.2	14.5	17.3
Blue Mountain Summit	5098	3/30	31	10.5	10.5	8.6
Derr	5670	3/25	33	12.5	11.0	11.0
East Fork Canyon[e]	5700	3/30	36	15.1	11.5	- -
Gold Center	5340	3/25	36	14.9	12.9	13.7
Indian Creek Butte[e]	6550	3/30	80	33.6	23.0	- -
Izee Summit	5293	3/29[j]	19	8.0	8.4	8.8
Lucky Strike	5050	3/26	65	19.5	14.1	14.6[h]
Marks Creek	4540	3/26	4	1.0	6.5	2.4
Ochoco Meadows	5200	3/30	22	8.4	9.3	11.6
Olive Lake	6000	3/28	87	30.9	22.6	22.5
Schoolmarm	4775	3/31	13	4.8	7.6	5.2[h]
Snow Mountain	6300	3/29	40	17.2	10.9	14.7
Starr Ridge	5150	3/29[j]	16	7.5	5.1	5.3
Tipton	5100	3/30	34	12.0	12.5	11.0[h]
Williams Ranch	4500	[b]				

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

UPPER JOHN DAY WATERSHEDS



WATERSHED LOCATION

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Soil Moisture Station
- Aeriol Snow Depth Gage
- Precipitation Gage

WATER SUPPLY OUTLOOK
UPPER DESCHUTES, CROOKED WATERSHEDS
OREGON

as of

APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Farmers and ranchers in Crook, Deschutes and Jefferson counties will have average to excellent irrigation water supplies in 1965 despite two record-breaking early winter floods followed by two months of record-breaking drought. Stored water supplies are much greater than usual; the mountain snowpack is near average and lies on watershed soils that are nearly saturated.

SNOW COVER

The massive snowpack, which accumulated immediately after the early winter floods, has increased very little during the past 60 days but has a water content 87 percent of the April first average on the Deschutes and 98 percent average on the Crooked.

SOIL MOISTURE

Watershed soils under the snowpack are extremely wet and at the Marks Creek and Snow Mountain sites they are wet up to 96 percent of capacity.

RESERVOIR STORAGE

Stored water in Ochoco and Prineville reservoirs is 40,460 and 139,249 acre feet, respectively. These amounts are well above average and will furnish excellent supplies to down-stream users.

On the Deschutes stored water is now 65,022 acre feet in Crescent Lake; 56,283 a. f. in Crane Prairie and 202,078 acre feet in Wickiup Reservoir. These last two reservoirs are spilling and the water outlook is excellent.

STREAMFLOW

Flow of the Deschutes River at Moody* was equal to the 15 year average (1948-62) during March. The total flow since October first is 15 percent greater than average.

Forecasts of streamflow for the irrigation season, April through September, have been lowered about 15 percent since February first due to the drought.

The Deschutes at Benham Falls is forecast at 105 percent of average and the Little Deschutes near Lapine is expected to flow 106 percent average in the same period.

Tumalo and Squaw creeks are forecast to deliver 104 and 107 percent of the 15 year average amount.

Crooked River near Post is forecast at 110 percent of average and inflow to Ochoco Reservoir is expected to be 94 percent average in the next six months.

There will be adequate water supplies for all lands unless drought conditions prevail.

*Preliminary data from U. S. Geological Survey, Portland, Oregon.

Report prepared by
W.T. FROST AND BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Arnold Irrigation District	Excellent	Average
Bear Creek	Average	Average
Beaver Creek	Average	Average
Camp Creek	Average	Average
Central Ore. Irrig. Dist.	Excellent	Average
Crooked River	Average	Average
Deschutes River	Average	Average
Hay-Trout Creeks	Average	Average
Lone Pine Irrig. Dist.	Excellent	Average
Mill Creek	Average	Average
North Unit Irrig. Dist.	Excellent	Average
Ochoco Creek	Average	Average
Sisters Irrigation Dist.	Excellent	Average
Snow Creek Irrig. Dist.	Excellent	Average
Squaw Creek Irrig. Dist.	Excellent	Average
Swalley Ditch	Excellent	Excellent
Tumalo Project	Excellent	Average
Walker Basin Irrig. Dist.	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1965

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Crane Prairie	55.3	56.3	41.6	46.5
Crescent Lake	117.2	65.0	49.9	51.2
Ochoco	47.5	40.5	27.8	32.1
Prineville	153.0	139.2	108.9	- -
Wickiup	200.0	202.1	187.3	188.2

Note: Current storage figure for Crescent Lake includes 5360 acre feet of known dead and inactive storage.

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1965

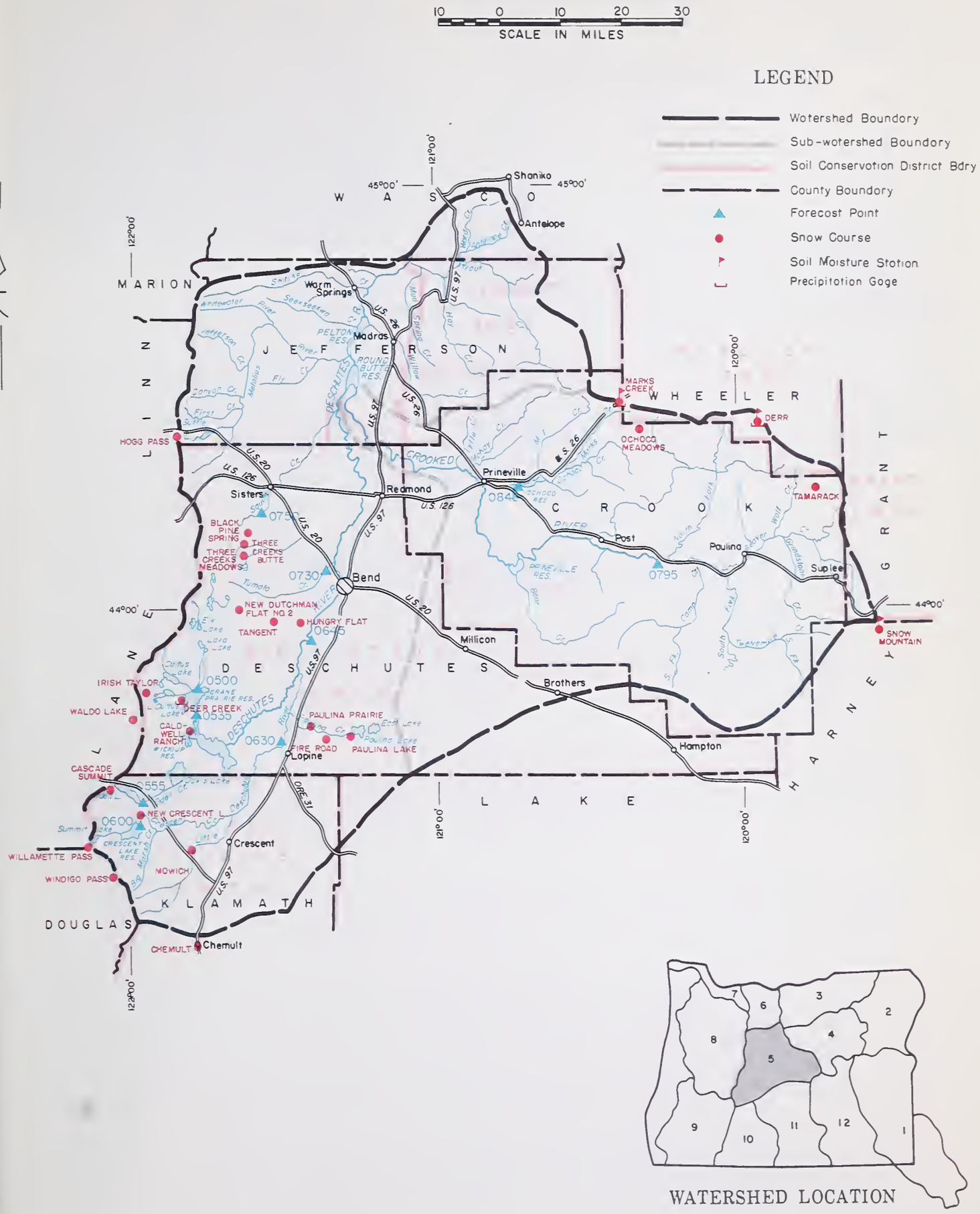
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
0535	Crane Prairie Reservoir total Inflow	96	April-July	94	102
		145	April-Sept.	143	101
0600	Crescent at Crescent Lake[d]	28	April-July	26	107
		35	April-Sept.	33	106
0795	Crooked near Post	136	April-July	123	111
		138	April-Sept.	125	110
0645	Deschutes at Benham Falls[d]	442	April-July	417	106
		662	April-Sept.	631	105
0500	Deschutes below Snow Creek	77	April-Sept.	75	103
0630	Deschutes, Little near Lapine[d]	106	April-July	99	107
		120	April-Sept.	113	106
0848	Ochoco Reservoir net Inflow	30	April-Sept.	32	94
0555	Odell near Crescent	35	April-Sept.	34	103
0750	Squaw near Sisters	60	April-Sept.	56	107
0730	Tumalo near Bend[d]	56	April-Sept.	54	104

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Derr	5670	24	9.0	b			
Marks Creek	4540	36	14.1	3-26-65	13.6	9.3	13.8
Snow Mountain	6300	48	16.7	3-29-65	15.9	12.4	14.9

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

UPPER DESCHUTES, CROOKED WATERSHEDS



OR-5c

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Black Pine Spring	4600	4/2 [j]	0	0.0	5.2	5.2 [h]
Caldwell Ranch	4400	3/31	5	1.8	12.6	11.0
Cascade Summit	4880	3/30	72	32.5	37.4	36.2
Chemult	4760	3/29	11	4.3	10.6	10.5
Deer Creek	4554	3/31	44	17.7	- -	- -
Derr	5670	3/25	33	12.5	11.0	11.0
Fire Road	5050	[b]				
Hogg Pass	4755	3/31	97	43.4	49.1	49.7
Hungry Flat	4400	4/1 [j]	0	0.0	5.7	4.2 [h]
Irish Taylor	5500	3/31	89	40.5	44.3	44.6 [h]
Marks Creek	4540	3/26	4	1.0	6.5	2.4
Mowich	4700	3/29	0	0.0	6.3	2.9 [h]
New Crescent Lake	4800	3/26	31	11.3	19.4	17.8 [h]
New Dutchman Flat #2	6400	4/1 [j]	135	62.4	55.6	57.7
Ochoco Meadows	5200	3/30	22	8.4	9.3	11.6
Paulina Lake	6330	[b]				
Paulina Prairie	4285	[b]				
Snow Mountain	6300	3/29	40	17.2	10.9	14.7
Tamarack	4800	3/24	7	2.8	7.8	- -
Tangent	5400	4/1 [j]	50	22.3	25.1	25.0 [h]
Three Creeks Meadows	5650	4/2 [j]	44	20.5	21.5	23.6
Waldo Lake	5500	3/31	74	32.6	38.6	34.5
Willamette Pass	5600	3/25	90	41.5	48.2	46.3 [h]
Windigo Pass	5800	3/30	108	50.1	49.9	48.7

WATER SUPPLY OUTLOOK
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS
OREGON

as of
APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Water users in Hood River and Wasco counties will have average water supplies in 1965 despite two months of severe drought which were preceded by two record-breaking floods. Mountain snowcover is near average and watershed soils are extremely wet under the snow.

SNOW COVER

Water content of the mountain snowpack is 90 percent of the usual April first amount and 82 percent of last year at this date.

SOIL MOISTURE

Watershed soils underlying the snowpack are very wet and will favor runoff from snowmelt and rainfall.

RESERVOIR STORAGE

Clear Lake Reservoir now holds about 6,400 acre feet for use by the Juniper Flat Irrigation District. This figure is much greater than the 1,800 acre feet on hand one year ago. Other small reservoirs are unreported at this time.

STREAMFLOW

Forecasted flow of streams in the Hood River-Wasco area has been reduced considerably due to drought conditions. The following forecasts are compared with the 15 year average (1948-62):

Flow of Hood River, West Fork near Dee, is expected to be 170,000 acre feet or 95 percent of the 15 year average for April through September. The main Hood River near Hood River is forecast to flow 355,000 acre feet or 93 percent average. Last year's flow at this station was 322,000 acre feet.

White River is forecast to flow 175,000 acre feet or 99 percent average for the same six months.

Flow of smaller streams, such as Mill and Mile creeks and Badger, Rock and Gate creeks, will probably be slightly below their usual performance with late-season flow tapering off slightly earlier than usual.

Report prepared by
W.T. FROST AND BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Aldridge Ditch	Average	Average
Badger Creek	Average	Average
Dee Irrigation District	Average	Average
East Fork Irrig. Dist.	Average	Average
Farmers Irrigation Dist.	Average	Average
Hood River Irrig. Dist.	Average	Average
Juniper Flat	Average	Average
Middle Fork Irrig. Dist.	Average	Average
Mile Creeks	Average	Average
Mill Creek	Average	Average
Mount Hood Irrig. Dist.	Average	Average
Rock-Gate-Threemile Crs.	Average	Average
Tygh Creek	Average	Average
White River	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1965

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Clear Lake	11.8	6.4	1.8	- -

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1965

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
1210	Hood near Hood River[d]	302	April-July	322	94
		355	April-Sept.	381	93
1185	Hood, West Fork near Dee	146	April-July	155	94
		170	April-Sept.	179	95
1015	White below Tygh Valley	155	April-July	158	98
		175	April-Sept.	176	99

SNOW

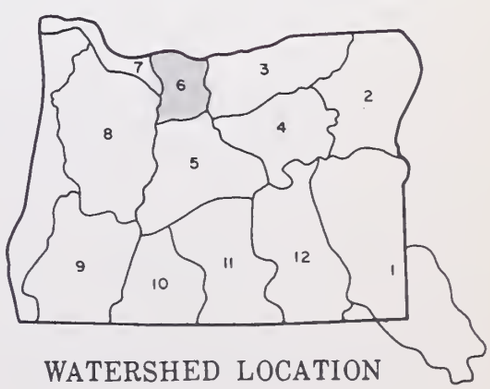
SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches) LAST YEAR	WATER CONTENT (Inches) 1948-62 AVERAGE
Brooks Meadows	4300	4/5	9	4.5	14.6	14.5
Clear Lake	3500	3/30	28	11.0	12.7	14.5
Clear Lake (experimental)	3500	3/30	49	18.5	18.5	- -
Cooper Spur	3490	c				
Greenpoint Reservoir	3400	3/30	51	19.9	17.7	19.2
Knebal Springs	3850	4/5	15	6.8	8.8	- -
Lambert Point	7000	Not surveyed				
Parkdale	1770	c				
Phlox Point	5600	3/30	129	59.7	81.7	70.4
Red Hill	4400	4/5	85	39.7	62.6	52.9
Still Creek	3700	3/30	62	25.1	35.1	29.3
Switchback	3255	4/1	28	12.1	24.2	- -
Tilly Jane	6000	3/21	103	49.4	48.4	50.1
Ulrich Ranch Junction	3350	4/5	0	0.0	2.8	- -
Umbrella Falls	5400	4/5[j]	152	73.9	- -	- -
Upper Valley	2530	c				

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Aerial Snow Depth Goge
- Soil Moisture Station



WATERSHED LOCATION

Hood, Mile Creeks, Lower Deschutes Watersheds

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
LOWER COLUMBIA WATERSHEDS
OREGON

as of
APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Even with an extreme deficiency in snowfall during February and March, water supply outlook remains good for both irrigation and power throughout the basin. This lack of snowfall, along with lowering of reservoirs, has largely eliminated the possibilities of excess water problems on Snake River tributaries as was indicated two months ago.

SNOW COVER

During December and January precipitation was far above average, leaving extremely heavy snowpack at higher elevations in the interior areas of the basin. Less snow cover had accumulated in the British Columbia section of the basin and in the Cascade range of Oregon and Washington. Near the coast much of the heavy precipitation came as rainfall and tended to melt rather than increase the snowpack. With a dry February and March, snow cover has declined to near average or less in the western section of the basin and to 120 to 140 percent of average on the Snake and its tributaries and the adjacent Clark Fork watershed in western Montana.

SOIL MOISTURE

Soil moisture remains good under the mountain snowpack even with an extended dry period in February and March. Valley soils have lost considerable moisture at the surface.

STREAMFLOW

The flow of the Columbia at The Dalles has been high since October 1 and particularly high during the three months of December, January, and February. The forecast of flow at this point for the April-September, 1965 period is about 121,000,000 acre feet or 111 percent of average. The flow for the same period in 1964 was 108,000,000 acre feet. The record of the flow at The Dalles* for the winter months is as follows:

Month	Percent of Average Discharge (1948-62)
October	113 (Adjusted for storage)
November	97 " " "
December	163 " " "
January	143 " " "
February	152 " " "
March	117 " " "

* Preliminary data furnished by Current Records Center, U. S. Geological Survey, Portland, Oregon.

Report prepared by
HOMER J. STOCKWELL
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
511 N.W. BROADWAY, RM. 507
PORTLAND, OREGON 97209

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1965

FORECAST POINT NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
1057	Columbia at The Dalles	85,500 121,000	April-June April-Sept.	74,100 108,500	115 111

HISTORICAL DATA (Columbia River at The Dalles)

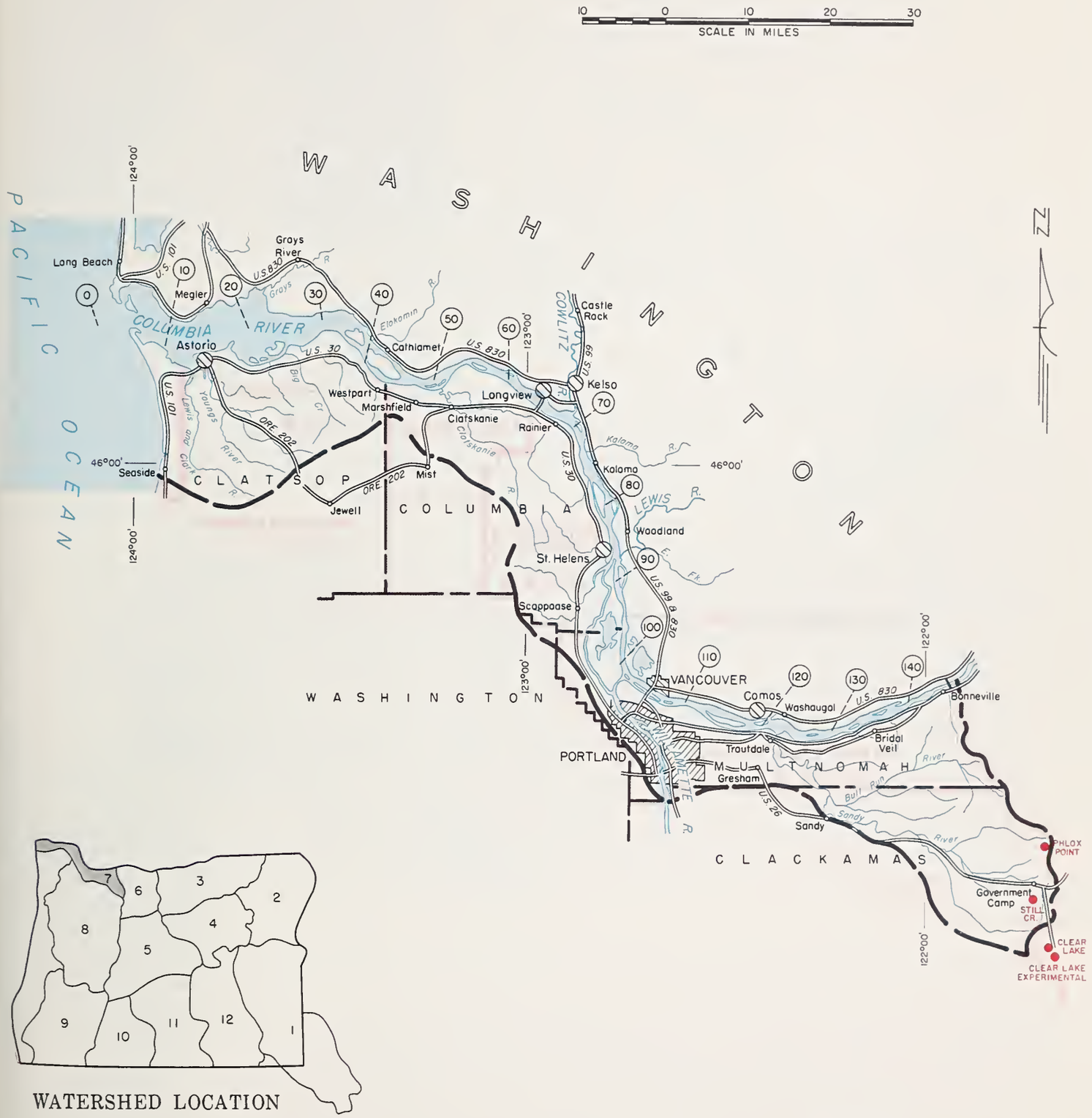
YEAR	STREAMFLOW[d] (1,000 A.F.) APR.— SEPT.	APR.— JUNE	MAY— JUNE	PEAK (1,000 c.f.s)	DATE
1943	115,000	75,300	52,400	541	June 21
1944	61,900	39,200	32,100	326	June 19
1945	81,600	54,600	47,300	505	June 8
1946	108,100	75,400	59,600	581	May 30
1947	100,300	70,000	56,800	536	May 11
1948	130,500	94,600	81,900	999	May 31
1949	95,700	71,400	56,000	622	May 18
1950	120,400	74,700	61,200	744	June 25
1951	113,000	75,600	59,100	597	May 26
1952	107,700	77,500	57,300	557	May 28
1953	100,600	64,900	55,800	609	June 17
1954	119,500	70,500	59,300	561	May 23
1955	99,500	58,300	50,300	545	June 26
1956	131,400	96,900	75,800	815	June 3
1957	105,700	80,500	67,200	700	May 22
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1948-62 Avg.	108,500	74,100	60,200	633	
1963	87,000	56,300	46,200	437	June 18

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu.)	FLOW AT THE DALLES (1,000 c.f.s)	DRAINAGE DISTRICT PUMPHOUSE SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES 118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.

LOWER COLUMBIA WATERSHEDS



WATERSHED LOCATION

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- (50) River Miles
- Snow Course

"The Conservation of Water begins with the Snow Survey."

WATER SUPPLY OUTLOOK
WILLAMETTE WATERSHEDS
OREGON

as of

APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Water users in the Willamette Basin can expect "near average" water supplies this summer despite two months of severe drought preceded by two record breaking floods. Snow cover did not get the usual increases during March but is still only slightly below average. Watershed soils are well primed and reservoir storage is good.

SNOW COVER

Water content of the snowpack in the Willamette Basin is now 86 percent of the 1948-62 average for April 1. High elevation snow courses did not get the usual March increases and low to median elevation courses show significant losses due to the lack of precipitation and warm temperatures during the month.

SOIL MOISTURE

Watershed soils under the snowpack are well primed and should aid runoff from snowmelt or spring rains.

RESERVOIR STORAGE

The seven multipurpose reservoirs on the Willamette tributaries have been lowered by the Corps of Engineers to accomodate spring peak flows. They are a little below average for April 1. Timothy Lake is full and spilling all inflow.

STREAMFLOW

Flow of the Willamette River fell off as a result of the March drought over most of the basin.

Preliminary data from the U. S. Geological Survey indicates the Middle Fork Willamette flowed only 58 percent of the 1948-62 March average and has flowed 160 percent of the October 1-March 31 period.

Streamflow forecasts for the April-September period are as follows:

Row near Dorena	100,000 acre feet	89 percent
Middle Fork Willamette	900,000 acre feet	93 percent
McKenzie near Vida	1,300,000 acre feet	93 percent
South Santiam	650,000 acre feet	96 percent
North Santiam	910,000 acre feet	92 percent
Willamette at Salem	5,010,000 acre feet	90 percent
Clackamas at Estacada	785,000 acre feet	88 percent

Report prepared by
W.T. FROST AND BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Calapooya	Average	Average
Clackamas	Average	Average
McKenzie	Average	Average
Molalla	Average	Average
Santiam, North	Average	Average
Santiam, South	Average	Average
Willamette, Coast Fork	Average	Average
Willamette, Middle Fork	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1965

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cottage Grove	30.8*	11.9	16.4	18.3
Cougar	219.3*	52.0	62.8	- -
Detroit	299.9*	162.4	128.8	173.5[m]
Dorena	70.5*	24.3	39.5	38.7[m]
Fern Ridge	94.2*	48.2	67.1	67.1
Hills Creek	249.0*	102.4	125.0	- -
Lookout Point	337.2*	137.6	149.2	183.0[m]
Timothy Lake	61.7	61.7	39.3	46.2[m]

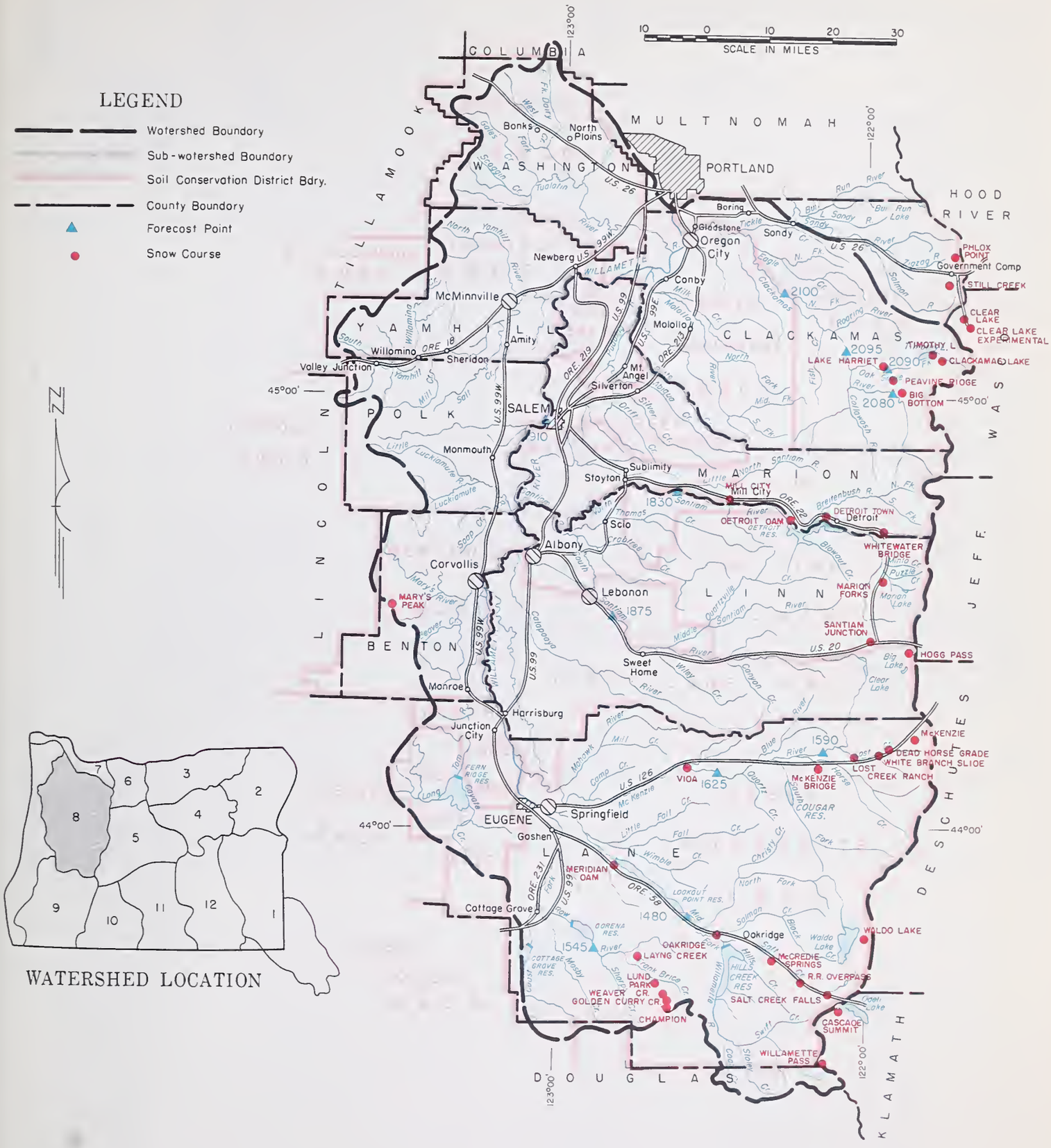
*Multiple purpose reservoir--space reserved primarily for flood runoff.

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1965

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
2080	Clackamas at Big Bottom	136	April-July	150	91
		166	April-Sept.	184	90
2100	Clackamas at Estacada	678	April-July	770	88
		785	April-Sept.	890	88
2095	Clackamas above Three Lynx	526	April-July	584	90
		608	April-Sept.	683	89
1590	McKenzie at McKenzie Bridge	472	April-July	502	94
		612	April-Sept.	658	93
1625	McKenzie near Vida	1075	April-July	1144	94
		1300	April-Sept.	1392	93
2090	Oak Grove Fork above Power Intake	135	April-July	147	91
		175	April-Sept.	190	92
1545	Row near Dorena	97	April-July	108	90
		100	April-Sept.	112	89
1830	Santiam, North at Mehama [d]	813	April-July	884	92
		910	April-Sept.	991	92
1875	Santiam, South at Waterloo	612	April-July	637	96
		650	April-Sept.	675	96
1480	Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge [d]	803	April-July	863	93
		900	April-Sept.	968	93
1910	Willamette at Salem [d]	4586	April-July	5040	91
		5010	April-Sept.	5566	90

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WILLAMETTE WATERSHEDS



WATERSHED LOCATION

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Big Bottom	2118	4/3	0	0.0	2.2	6.4 h
Cascade Summit	4880	3/30	72	32.5	37.4	36.2
Champion	4500	4/1	53	23.2	40.9	33.8
Clackamas Lake	3400	3/31	26	11.5	20.5	15.7
Clear Lake	3500	3/30	28	11.0	12.7	14.5
Clear Lake (experimental)	3500	3/30	49	18.5	18.5	- -
Dead Horse Grade	3800	3/31	45	19.1	32.4	23.3 h
Detroit Town	1610	3/31	0	0.0	0.0	0.0 h
Detroit Dam	1580	3/31	0	0.0	0.0	0.0 h
Golden Curry Creek	3136	4/1	T	T	17.4	6.3 h
Hogg Pass	4755	3/31	97	43.4	49.1	49.7
Lake Harriet	2045	4/2	0	0.0	0.0	0.3 h
Layng Creek	1200	4/1	0	0.0	0.0	0.0 m h
Lost Creek Ranch	1956	3/31	0	0.0	6.4	1.1 h
Lund Park	1740	4/1	0	0.0	0.0	0.0 m
Marion Forks	2730	3/31	21	9.6	- -	16.6 m
Marys Peak	3620	4/4	15	6.6	21.7	15.4 h
McCredie Springs	2120	3/30	0	0.0	0.0	0.0 h
McKenzie	4800	3/31	96	46.4	54.6	51.3
McKenzie Bridge	1372	3/31	0	0.0	0.0	0.0 m
Meridian Dam	750	3/30	0	0.0	0.0	0.0 m h
Mill City	826	3/31	0	0.0	0.0	0.0 m h
Oakridge	1310	3/30	0	0.0	0.0	0.0 h
Peavine Ridge	3500	4/2	42	17.0	27.5	22.9
Phlox Point	5600	3/30	129	59.7	81.7	70.4
Railroad Overpass	2750	3/30	0	0.0	6.2	2.4 h
Salt Creek Falls	4000	3/30	42	19.3	26.7	20.1 h
Santiam Junction	3990	3/31	33	15.2	32.3	28.5
Still Creek	3700	3/30	62	25.1	35.1	29.3
Timothy Lake	3295	4/2	46	18.5	22.9	18.3 h
Vida	800	3/31	0	0.0	0.0	0.0 h
Waldo Lake	5500	3/31	74	32.6	38.6	34.5
Weaver Creek	2440	4/1	0	0.0	T	2.1 h
White Branch Slide	2800	3/31	T	T	15.3	5.6 h
Whitewater Bridge	2175	3/31	0	0.0	2.9	4.8 h
Willamette Pass	5600	3/25	90	41.5	48.2	46.3 h

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
ROGUE, UMPQUA, WATERSHEDS
OREGON

as of

APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Water users in Jackson, Josephine and Douglas counties will have adequate water supplies in 1965 despite two record-breaking early-winter floods followed by two months of severe drought.

SNOW COVER

Water content of the mountain snowpack is 80 percent of the 15 year (1948-62) average and 64 percent of last year on the Umpqua. Snow on the Rogue watersheds is 84 percent of average and 75 percent of last year.

High elevation snow is very heavy and will provide adequate flow in major streams. Flow of small streams will taper off several weeks earlier than usual due to the light snowpack at moderate and low elevations.

SOIL MOISTURE

Watershed soils under the snowpack are very wet and will favor runoff from melting snow or rainfall.

RESERVOIR STORAGE

Stored water supplies are at an all-time high.

Howard Prairie, Hyatt Prairie and Emigrant Gap reservoirs contain a total of 113,000 acre feet of water compared with 93,200 acre feet one year ago for use of Talent Irrigation District.

Fish Lake and Fourmile Lake reservoirs contain a total of 21,200 acre feet of water compared with 18,200 acre feet last year for use by the Medford and Rogue River Valley Irrigation Districts.

STREAMFLOW

Flow of Rogue River at Raygold* was 70 percent average for the month of March and 182 percent average for the October 1 - March 31 period.

The following forecasts of streamflow for the April through September period are compared with average flows for the 15 year period 1948-62. These estimates have been lowered an average of 15 percent due to March drought conditions.

North Umpqua near Toketee Falls	170,000 a. f.	91 percent average
Rogue above Prospect	340,000 a. f.	96 percent average
Rogue below South Fork	716,000 a. f.	95 percent average
Rogue at Raygold	950,000 a. f.	95 percent average
Applegate near Copper	130,000 a. f.	92 percent average
Illinois at Kerby	200,000 a. f.	94 percent average

These forecasts are made on the assumption that average conditions of temperature and precipitation will prevail during the runoff period.

* Preliminary data from Pacific Power & Light Co., Medford, Oregon.

Report prepared by
W.T. FROST AND BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Althouse Creek	Average	Fair
Applegate River, Big	Average	Average
Applegate River, Little	Average	Average
Ashland Creek	Average	Average
Butte Creek, Little	Average	Average
Butte Creek, Big	Average	Average
Cow Creek	Average	Fair
Deer Creek	Average	Fair
Elk Creek	Average	Fair
Emigrant Creek (abv. Res.)	Average	Average
Evans Creek	Average	Fair
Gold Hill Irrigation Dist.	Excellent	Average
Grants Pass Irrig. Dist.	Excellent	Average
Grave Creek	Average	Fair
Illinois River, East Fork	Average	Average
Illinois River, West Fork	Average	Average
Jump-off Joe Creek	Average	Fair
Neil Creek	Average	Average
Red Blanket Creek	Average	Average
Rogue River	Average	Average
Sucker Creek	Average	Average
Table Rock Irrig. Dist.	Excellent	Average
Thompson Creek	Average	Average
Wagner Creek	Average	Fair
Williams Creek	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1965

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Emigrant Gap	39.0	36.3	36.0	33.2*
Fish Lake	7.8	7.9	4.8	5.7
Fourmile Lake	16.1	13.3	13.4	9.5
Howard Prairie	60.0	60.6	44.7	- -
Hyatt Prairie	16.1	16.2	12.5	9.4

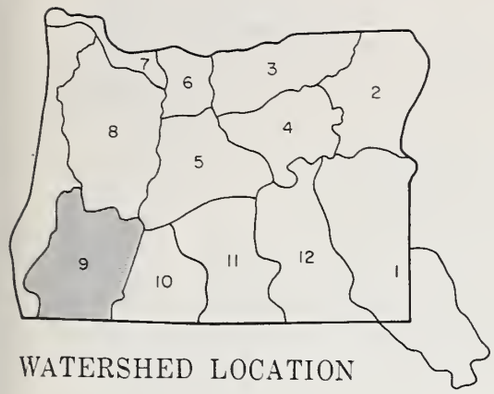
*4 yr. average after reconstruction.

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1965

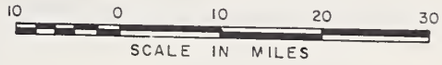
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
3620	Applegate near Copper	130	April-Sept.	142	92
3145	Clearwater above Trap Creek[d]	71	April-Sept.	75	95
5045	Fourmile Lake net Inflow[d]	6.3	April-Sept.	6.6	95
5140	Hyatt Reservoir net Inflow[d]	5.1	April-Sept.	6.4	80
3770	Illinois River at Kerby	196	April-July	206	95
		200	April-Sept.	212	94
3425	Little Butte, N. Fk. at Fish Lk. nr. Lake Cr.[d]	14.0	April-Sept.	16.0	88
3415	Little Butte, So. Fk. nr. Lake Creek	32	April-July	38	84
	Note: Minimum flow will drop to 100 c.f.s. by May 28.				
3280	Rogue above Prospect	283	April-July	295	96
		340	April-Sept.	355	96
3320	Rogue, South Fork near Prospect[d]	68	April-July	70	97
		80	April-Sept.	82	97
3350	Rogue River below South Fork	587	April-July	611	96
		716	April-Sept.	754	95
3590	Rogue at Raygold near Central Point	804	April-July	837	96
		950	April-Sept.	1001	95
3615	Rogue at Grants Pass	943	April-Sept.	993	95
3135	Umpqua, No. blw. Lemolo Res. nr. Toketee Falls[d]	170	April-Sept.	186	91

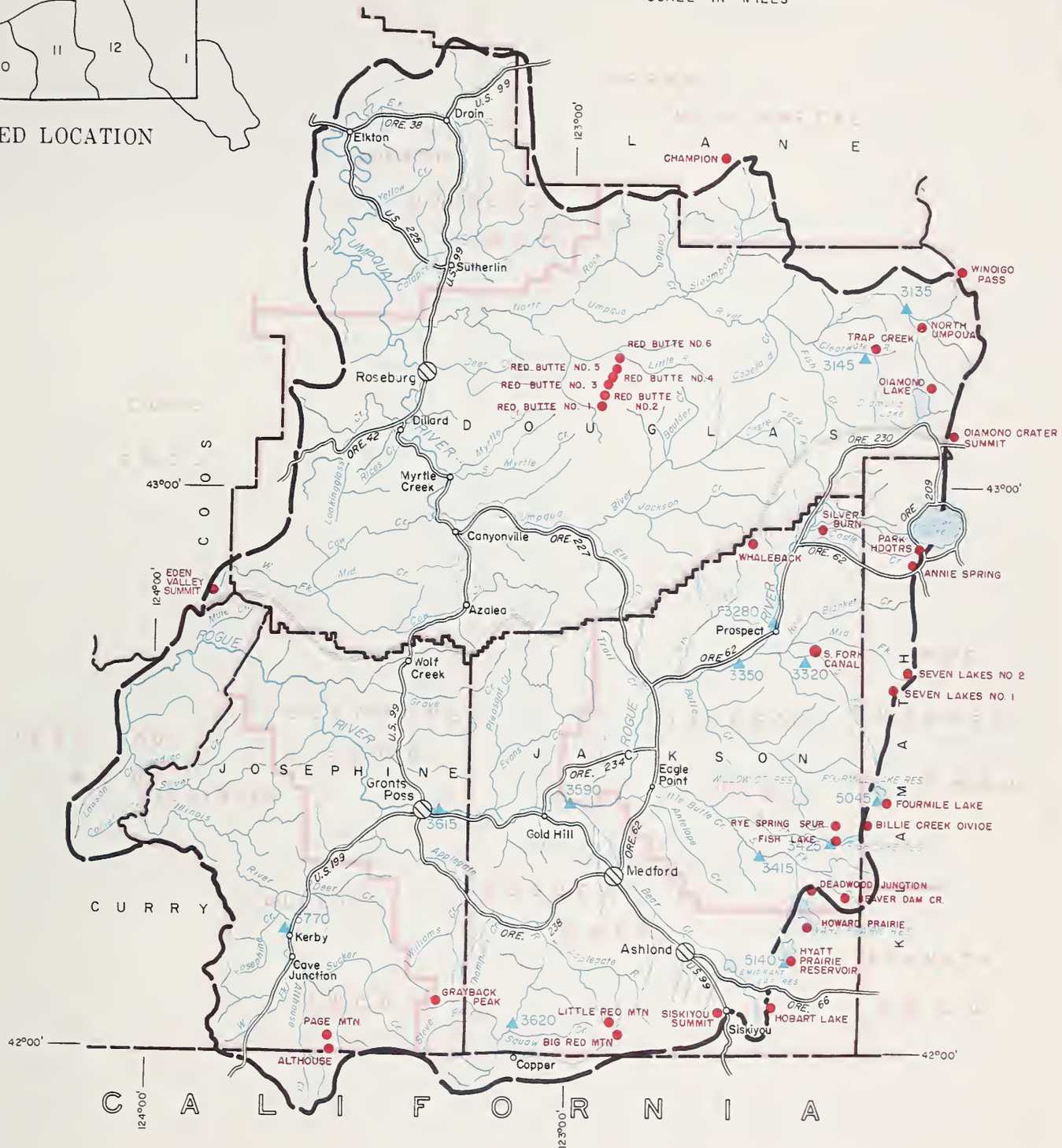
(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

ROGUE, UMPQUA WATERSHEDS



WATERSHED LOCATION





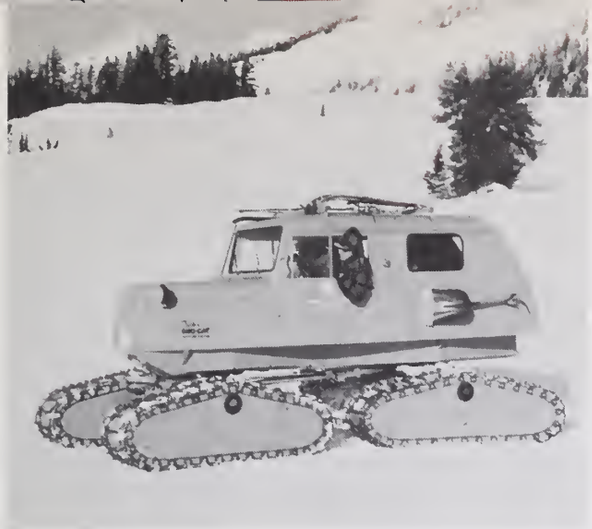
LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- Forecast Point
- Snow Course

SNOW

SNOW COURSE NAME	ELEVATION	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (Inches)	CURRENT INFORMATION: WATER CONTENT (Inches)	PAST RECORD: WATER CONTENT (Inches) LAST YEAR	PAST RECORD: WATER CONTENT (Inches) 1948-62 AVERAGE
Althouse	4530	3/30	4	1.8	11.6	7.2
Annie Spring	6018	3/29	113	51.8	45.4	49.7
Beaver Dam Creek	5100	4/2 [j]	T	T	20.2	- -
Big Red Mountain	6500	3/29	62	27.8	24.1	32.6
Billie Creek Divide	5300	3/26	42	17.6	30.0	25.4
Champion	4500	4/1	53	23.2	40.9	33.8
Cold Springs Camp	6100	3/25	86	38.0	41.4	- -
Deadwood Junction	4600	4/2 [j]	0	0.0	16.5	- -
Diamond Crater Summit	5800	3/24	96	42.5	38.5	- -
Diamond Lake	5315	3/24	49	21.8	26.0	26.6
Eden Valley Summit	2390	[b]				
Fish Lake	4865	4/2 [j]	0	0.0	20.0	16.9 [h]
Fourmile Lake	6000	4/2	47	19.4	30.2	31.3 [h]
Grayback Peak	6000	3/29	49	24.4	32.5	30.5
Howard Prairie	4500	4/2 [j]	0	0.0	13.4	- -
Hyatt Prairie Reservoir	4900	4/2 [j]	T	T	12.6	9.6 [h]
King Mountain #1	4800	[b]				
King Mountain #2	3646	[b]				
King Mountain #3	2550	[b]				
King Mountain #4	1779	[b]				
Little Red Mountain	6500	3/29	48	22.7	21.1	26.3
North Umpqua	4215	3/26	22	8.9	23.6	16.4
Page Mountain	4045	3/30	0	0.0	3.6	4.9 [h]
Park Headquarters	6450	3/29	157	76.7	62.5	62.1
Red Butte #1	4560	3/29	6	1.2	- -	- -
Red Butte #2	4000	3/29	4	1.2	19.2	- -
Red Butte #3	3500	3/29	0	0.0	17.6	- -
Red Butte #4	3000	3/29	0	0.0	9.0	- -
Red Butte #5	2500	3/29	0	0.0	0.0	- -
Red Butte #6	2000	3/29	0	0.0	0.0	- -
Seven Lakes #1	6800	3/30	144	66.8	61.3	64.3 [h]
Seven Lakes #2	6200	3/29	98	44.9	47.3	47.2
Silver Burn	3720	3/29	10	5.9	21.3	13.9
Siskiyou Summit	4630	3/28	T	T	7.6	3.6
South Fork Canal	3500	3/29 [j]	0	0.0	5.7	1.2
Trap Creek	3800	3/26	14	5.8	23.0	11.8 [h]
Whaleback	5140	4/1	73	31.1	40.0	38.6
Windigo Pass	5800	3/30	108	50.1	49.9	48.7

"The Conservation of Water begins with the Snow Survey"



WATER SUPPLY OUTLOOK
KLAMATH WATERSHEDS
OREGON

as of

APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Water users in Klamath basin will have excellent to average water supplies in 1965 despite two record-breaking early winter floods followed by two months of severe drought.

SNOW COVER

The drought has removed all low elevation snow. High elevation snow was not melted but at the same time did not increase at the usual March rate. Water content of the mountain snowpack now averages 80 percent of normal and 72 percent of last year but is unevenly distributed with 16 percent average on Lost River watersheds, 52 percent average on Sprague River, 85 percent on Williamson River and 91 percent on the east slope of the Cascades.

SOIL MOISTURE

All watershed soils underlying the snowpack are extremely wet and average about 90 percent of capacity. This will greatly favor runoff from melting snow and precipitation.

RESERVOIR STORAGE

Stored water supplies are unusually good in Gerber and Clear Lake reservoirs which now contain 80,660 and 289,930 acre feet respectively. Upper Klamath Lake contains 391,000 acre feet compared with 412,000 a.f. one year ago and a substantial inflow is yet to be received.

STREAMFLOW

Inflow to Upper Klamath Lake* was average during March in spite of the record-breaking drought. Inflow October 1 to March 31 has been 175 percent of average.

Forecasts of inflow to Gerber and Clear Lake reservoirs for the period April through September have been reduced about 28 percent by the drought but are now expected to be 18,500 acre feet and 40,000 acre feet respectively. These flows will be about 83 percent of the 15 year average.

Flow of the Sprague River is forecast at 350,000 acre feet or 121 percent average for the April through September period. The Williamson River is expected to flow 590,000 acre feet or 120 percent average for the same period. Inflow to Upper Klamath Lake is forecast at 770,000 acre feet, April through September, or 120 percent of the 15 year average 1948-62.

All of these forecasts have been substantially reduced by the March drought and are made on the assumption that temperature and precipitation during the runoff period will be near average.

* Preliminary data from Pacific Power and Light Co., Medford, Oregon.

Report prepared by
W.T. FROST AND BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Ft. Klamath Valley	Excellent	Average
Lost River (Clear Lake)	Excellent	Average
Lost River (Gerber)	Excellent	Average
Lost River (Willow Res.)	Excellent	Average
Sprague River	Excellent	Average
Upper Klamath Lake	Excellent	Average
Williamson River	Excellent	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1965

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Clear Lake	440.2	289.9	105.5	235.5
Gerber	94.0	80.7	38.9	49.4
Upper Klamath Lake	584.0	391.0	412.0	461.8

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1965

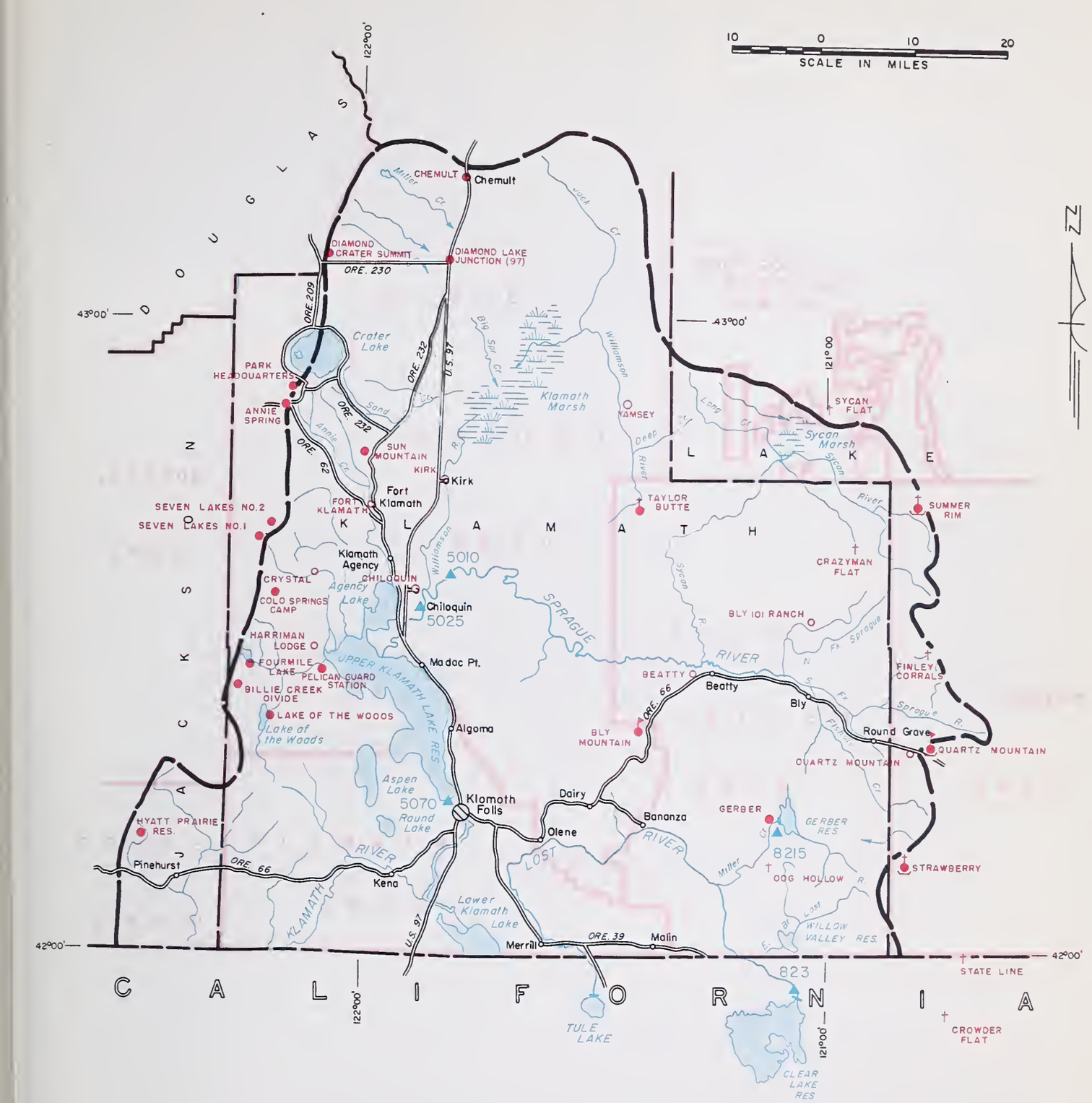
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
923	Clearlake Reservoir Inflow[k]	37	April-June	44	84
		40	April-Sept.	48	83
8215	Gerber Reservoir Inflow[k]	17.8	April-June	22	81
		18.5	April-Sept.	23	80
5010	Sprague near Chiloquin	312	April-July	256	122
		350	April-Sept.	289	121
5070	Upper Klamath Lake net Inflow[k]	638	April-July	527	121
		770	April-Sept.	639	120
5025	Williamson below Sprague River	500	April-July	413	121
		590	April-Sept.	490	120

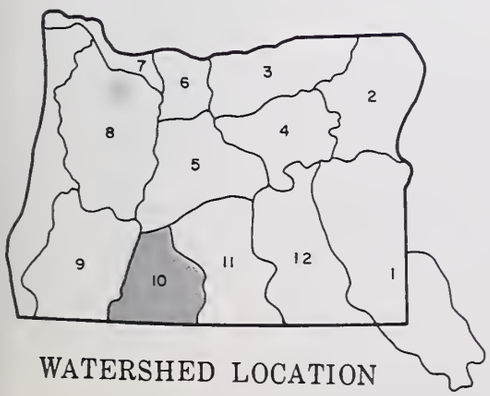
SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Bly Mountain	5090	42	14.0	4-2-65	12.6	10.5	12.8

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

KLAMATH WATERSHEDS





WATERSHED LOCATION

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Aerial Snow Depth Gage
- COPCO Snow Station
- Soil Moisture Station
- Precipitation Gage

SNOW

SNOW COURSE NAME	ELEVATION	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (Inches)	CURRENT INFORMATION: WATER CONTENT (Inches)	PAST RECORD: WATER CONTENT (Inches) LAST YEAR	PAST RECORD: WATER CONTENT (Inches) 1948-62 AVERAGE
Annie Spring	6018	3/29	113	51.8	45.4	49.7
Beatty (PP&L)	4400	3/31	0	0.0	0.0	0.0 [m]
Billie Creek Divide	5300	3/26	42	17.6	30.0	25.4
Bly Mountain	5090	4/2	0	0.0	10.5	3.9 [m]
Bly 101 Ranch (PP&L)	4800	3/31	0	0.0	2.3	0.1 [m]
Chemult	4760	3/29	11	4.3	10.6	10.5
Chiloquin (PP&L)	4187	3/31	0	0.0	0.0	T
Cold Springs Camp	6100	3/25	86	38.0	41.4	- -
Crazyman Flat [e]	6100	3/25	12	5.0	14.7	10.3 [m]
Crowder Flat [e] (Calif.)	5200	3/25	0	0.0	7.7	0.6 [m]
Crystal (PP&L)	4200	3/31	0	0.0	10.3	7.2
Diamond-Crater Summit	5800	3/24	96	42.5	38.5	- -
Diamond Lake Junction (97)	4600	3/24	2	1.1	8.9	- -
Dog Hollow [e]	4900	3/25	0	0.0	4.2	0.0 [m]
Finley Corrals [e]	6000	3/25	27	11.3	21.0	16.9 [m]
Fort Klamath (PP&L)	4150	3/31	0	0.0	4.9	1.2
Fourmile Lake	6000	4/2	47	19.4	30.2	31.3 [h]
Gerber	4850	3/31	0	0.0	4.2	0.8 [h]
Harriman (PP&L)	4200	3/31	0	0.0	8.4	1.1 [m]
Hyatt Prairie Reservoir	4900	4/2 [j]	T	T	12.6	9.6 [h]
Kirk (PP&L)	4533	3/31	0	0.0	6.4	2.1 [m]
Lake of the Woods	4960	3/27	19	7.4	15.8	12.4
Park Headquarters	6450	3/29	157	76.7	62.5	62.1
Pelican Guard Station	4150	3/25	0	0.0	7.3	- -
Quartz Mountain	5320	4/2	0	0.0	8.6	5.7
Quartz Mountain (PP&L)	5504	4/2	6	2.8	8.2	6.1
Seven Lakes #1	6800	3/30	144	66.8	61.3	64.3 [h]
Seven Lakes #2	6200	3/29	98	44.9	47.3	47.2
State Line [e] (Calif.)	5750	3/25	5	2.1	14.7	9.9 [m]
Strawberry	5760	Report delayed				
Summer Rim	7200	3/29	52	21.3	15.9	19.6
Sun Mountain	5350	3/23	57	23.7	27.0	28.6
Sycan Flat [e]	5500	3/25	0	0.0	8.4	4.6 [m]
Taylor Butte	5100	3/31	1	0.2	6.3	4.5 [h]
Yamsey (PP&L)	4600	[b]				

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
LAKE COUNTY, GOOSE LAKE WATERSHEDS
OREGON

as of
APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Water users in Lake County are expected to have excellent to near-average water supplies in 1965 despite the last two months of drought conditions following periods of early winter flooding.

Dry months of February and March reduced the snowpack and soil moisture at low elevation but soils at higher elevations under the snow are near capacity. Reservoir storage is excellent as a result of two periods of high runoff early in the winter.

SNOW COVER

Snow courses of Lake County did not gain the usual amounts during March due to lack of precipitation. Water content of the snowpack is now only 63 percent of the 1948-62 April 1 average for the entire area. Measurements on the Chewaucan indicate about 81 percent of average and Warner Valley 76 percent of the April 1 average. Goose Lake basin lost all low and median elevation snow and now averages only 49 percent of the 15 year April 1 average.

SOIL MOISTURE

Watershed soils under the remaining snowpack are well wetted to near total capacity. Soils at lower elevations have begun to dry out at the surface as a result of two near-drought months

RESERVOIR STORAGE

Drews Valley Reservoir now holds 56,800 acre feet or 129 percent of the April 1 average and 138 percent of last year.

Cottonwood Reservoir has 8,000 acre feet or 186 percent of average and almost 6 times last year at this time.

These reservoirs are 90 and 92 percent of capacity respectively, and should provide an excellent water supply for Lakeview water users.

STREAMFLOW

Streamflow forecasts have all been reduced as a result of the lack of precipitation during March. Forecasts now range from 94 percent on Twentymile Creek to 108 percent on the Chewaucan for the April-September period.

Deep Creek is forecast at 104 percent average and Honey Creek 96 percent for the same April-September period.

Report prepared by
W.T. FROST AND BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

The inflow to Drews Reservoir is expected to be 34,000 acre feet or 97 percent for this same period.

Flow of smaller streams heading at low elevations is expected to fall off two to three weeks earlier than usual due to the lack of low elevation snow.

These forecasts are made on the assumption that average conditions of temperature and precipitation will prevail during the runoff period.

WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Chewaucan River	Average	Average
Crooked Creek	Average	Average
Deep Creek	Average	Average
Dry Creek	Average	Fair
East Side Goose Lake	Average	Average
Guano Lake	Average	Fair
Honey Creek	Average	Average
Lakeview Water Users Assn.	Excellent	Average
Rock Creek (Hart Mtn.)	Average	Average
Silver-Buck Creeks	Average	Fair
Summer Lake	Average	Average
Thomas Creek	Average	Fair
Twentymile Creek	Average	Fair
Warner Lakes	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1965

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cottonwood	8.7	8.0	1.4	4.3*
Drew	63.0	56.8	41.2	44.1

*2 yr. average after reconstruction.

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1965

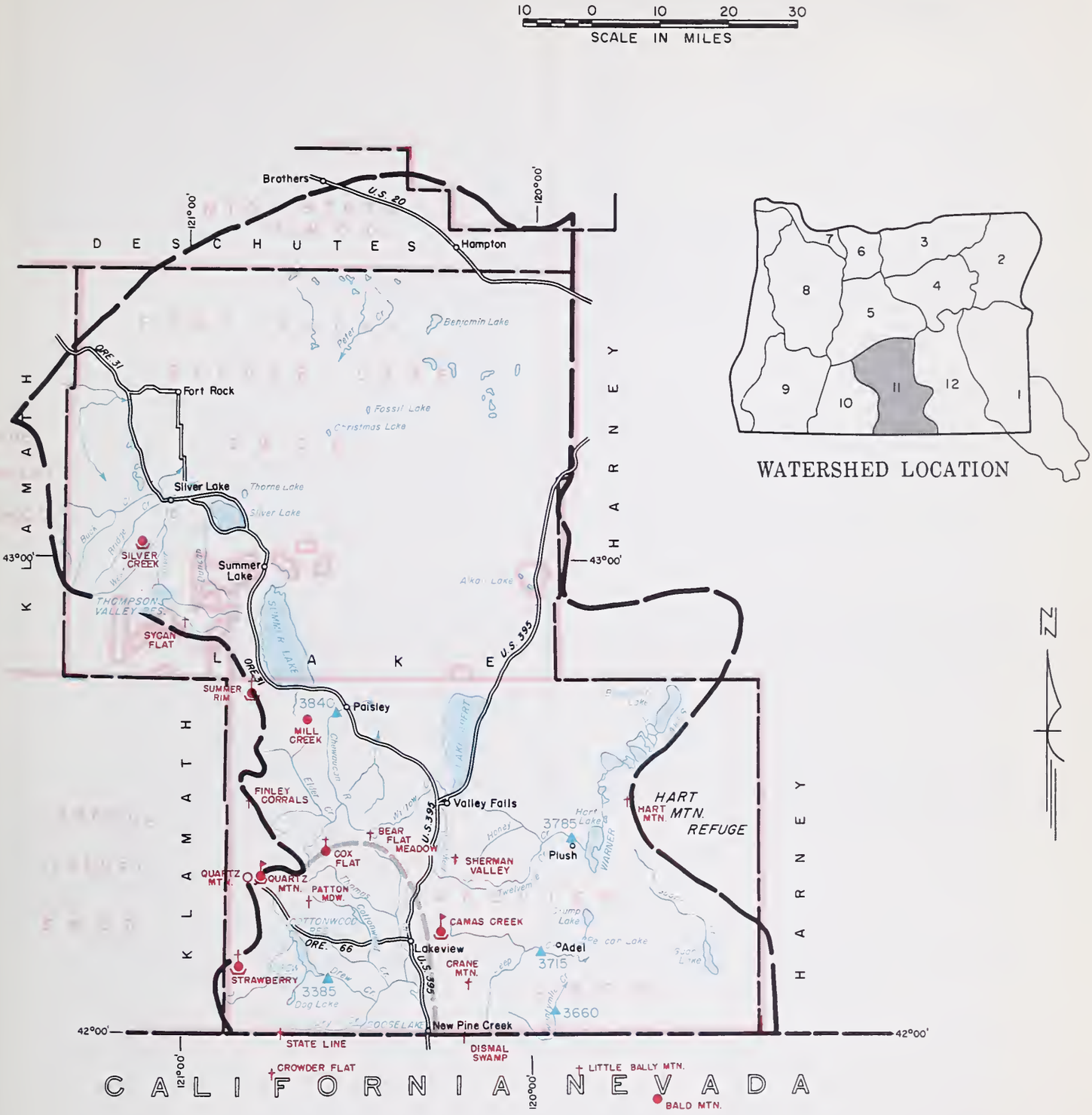
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
3840	Chewaucan near Paisley	85	April-June	79	108
		95	April-Sept.	88	108
3715	Deep above Adel	70	April-June	68	103
		75	April-Sept.	72	104
3385	Drew Reservoir net Inflow	34	April-July	35	97
		34	April-Sept.	35	97
3785	Honey near Plush	14,8	April-June	15.6	95
		15.5	April-Sept.	16.1	96
3660	Twentymile near Adel	20	April-June	21	95
		21	April-Sept.	22	94

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Camas Creek	5720	42	14.5	3-29-65	13.2	12.7	13.0[f]
Quartz Mountain	5320	48	15.3	4-2-65	10.6	8.4	11.0

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

LAKE COUNTY, GOOSE LAKE WATERSHEDS



WATERSHED LOCATION

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Aeriol Snow Depth Goge
- COPCO Snow Station
- Soil Moisture Station
- Precipitation Goge

Lake County, Goose Lake Watersheds

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Bald Mountain (Nev.)	6720	3/31	1	0.4	2.3	3.8
Bear Flat Meadow [e]	5900	3/25	20	8.4	11.6	12.6 [m]
Camas Creek	5720	3/29	15	6.3	12.4	12.0
Cox Flat [e]	5750	3/25	16	6.7	12.2	6.4 [m]
Crane Mountain [e]	6020	3/25	0	0.0	5.2	5.2 [m]
Crowder Flat [e] (Calif.)	5200	3/25	0	0.0	7.7	0.6 [m]
Dismal Swamp [e] (Calif.)	7000	3/25	45	18.9	18.2	20.6 [m]
Finley Corrals [e]	6000	3/25	27	11.3	21.0	16.9 [m]
Hart Mountain [e]	6350	3/25	1	0.4	1.2	1.2 [m]
Little Bally Mountain [e] (Nev.)	6600	3/25	0	0.0	2.8	- -
Mill Creek	6200	3/30	19	8.5	8.4	9.7
Patton Meadows [e]	6800	3/25	43	18.0	17.5	- -
Quartz Mountain (PP&L)	5504	4/2	6	2.8	8.2	6.1
Quartz Mountain	5320	4/2	0	0.0	8.6	5.7
Sherman Valley [e]	6600	3/25	26	10.9	13.3	13.4 [m]
Silver Creek	4900	3/29	0	0.0	2.1	1.4
State Line [e] (Calif.)	5750	3/25	5	2.1	14.7	9.9 [m]
Strawberry	5760	Not surveyed				
Summer Rim	7200	3/29	52	21.3	15.9	19.6
Sycan Flat [e]	5500	3/25	0	0.0	8.4	4.6 [m]

WATER SUPPLY OUTLOOK
HARNEY BASIN WATERSHEDS
OREGON

as of
APRIL 1, 1965

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Ranchers in Harney county will have average to fair irrigation water supplies in 1965. Two months of record-breaking drought, which followed severe early winter floods, has removed nearly all snow which normally produces streamflow in the smaller low elevation watersheds. Higher elevations have a near average snowpack which is expected to produce about average flows from larger streams.

SNOW COVER

Water content of the mountain snowpack is 103 percent of the average but about 10 percent less than last year at this date. The significant absence of snow in most moderate to low-elevation areas will mean only fair water supplies for some lands.

SOIL MOISTURE

Moisture in the watershed soils under the snowpack is exceptionally heavy and will greatly favor spring runoff. At the Silvies site on Steens Mountain, the soils are wet up to 82 percent of capacity. Four sites in the north half of Harney basin indicate soils there are wet up to 89 percent of capacity.

STREAMFLOW

Drought conditions have reduced expected runoff in the larger streams from 40 to 50 percent. The following forecasts for the flow from April through September assume normal temperatures and precipitation in the runoff period:

The Silvies River is forecast to flow 105,000 acre feet or 106 percent of the 15 year average (1948-62). Silver Creek is forecast at 23,000 acre feet or 105 percent average.

The Blitzen River is forecast to flow 65,000 acre feet or 105 percent of average and Trout Creek near Denio is expected to flow 9,000 acre feet or 107 percent average.

Report prepared by
W.T. FROST AND BOB L. WHALEY
U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Catlow Valley	Average	Fair
Cow Creek	Fair	Fair
Donner und Blitzen River	Average	Average
Mill-Coffeepot Creeks	Fair	Fair
Rattlesnake Creek	Fair	Fair
Silver Creek	Average	Average
Silvies River	Average	Average
Soldier-Prather Creek	Fair	Fair
Trout Creek	Average	Average
Whitehorse Creek	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1965

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1965

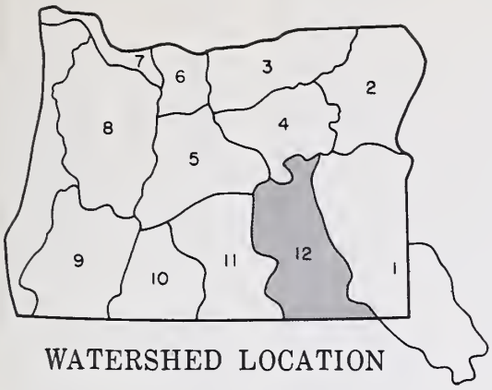
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
3960	Donner und Blitzen near Frenchglen	55	April-June	52	106
		65	April-Sept.	62	105
4030	Silver near Riley	23	April-July	22	105
3935	Silvies near Burns	103	April-June	96	107
		105	April-Sept.	99	106
4065	Trout near Denio	8.0	April-June	7.4	108
		9.0	April-Sept.	8.4	107

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Blue Mountain Springs	5900	42	16.9	3-29-65	12.3	7.9	13.5
Fish Creek	7900	48	15.0	c			
Folly Farm	4450	30	12.5	c			
Silvies	6900	48	16.4	3-30-65	13.4	10.4	13.3
Snow Mountain	6300	48	16.7	3-29-65	15.9	12.4	14.9
Starr Ridge	5150	36	10.6	3-29-65	10.4	8.5	10.5
Stinking Water Summit	4800	48	21.9	c			
Willow-Bald	5000	24	6.6	3-29-65	6.5	5.4	6.4

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

HARNEY BASIN WATERSHEDS



WATERSHED LOCATION

10 0 10 20 30
SCALE IN MILES

N

119°00'

44°00'

43°00'

42°00'

G R A N T

C R O O K

DESCHUTES

H A R N E Y

L A K E

CATLOW VALLEY

M A L H E U R

N E V A D A

Izee
Seneca
Burns
Hines
Harney
Buchanan
Crane
Princeton
Wagontire
Frenchglen
Fields
Denio
Fally Farm

STARR RIDGE
IZEE SUMMIT
BLUE MOUNTAIN SPRINGS
LAKE CREEK
ROCK SPRING
SNOW MOUNTAIN
DELINTMENT LAKE
IDLEWILD CAMP
CALL MEADOW
EMIGRANT BUTTE
3935
4030
WILLOW BALD
STINKING WATER
CROW CAMP
BUCK PASTURE
FOLLY FARM
BUCKSKIN LAKE
FOSTER FLAT
SILVIES
3960
FISH CREEK
HART MOUNTAIN
HART MTN. REFUGE
V LAKE
BLUE MTN. PASS
OREGON CANYON
4065
TROUT CREEK
DENIO CREEK
DISASTER PEAK

U.S. 20
U.S. 20 & 395
U.S. 395
ORE 78
ORE 205

Scotty Cr.
Emigrant Cr.
Silvies
Silver
Mill Cr.
Coffeepot
Rattlesnake Cr.
Malheur Lake
Harney Lake
Donner und Blitzen River
Riddle Cr.
Kiger
Smith Cr.
McCoy
Cucamonga Cr.
Bridge
Mud Cr.
Roaring Spring
Indian Cr.
Home Fk.
Rock
Skull
Alvord Lake
Willow
Trout Cr.
Pueblo Cr.
Beacon

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Aerial Snow Depth Gage
- Soil Moisture Station
- Precipitation Gage

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Blue Mountain Springs	5900	3/29	61	22.2	14.5	17.3
Buck Pasture [e]	5700	3/29	0	0.0	9.6	- -
Buckskin Lake [e]	5200	3/29	0	0.0	0.0	- -
Call Meadows [e]	5340	3/29	6	2.3	5.9	- -
Crow Camp [e]	5500	3/29	0	0.0	4.0	- -
Delintment Lake	5600	3/29	12	6.2	5.8	9.0 [h]
Denio Creek [e]	6000	3/29	0	0.0	0.0	- -
Disaster Peak (Nev.)	6500	3/29	21	8.9	11.7	11.7 [h]
Emigrant Butte	5000	3/29	0	0.0	3.4	2.4 [h]
Fish Creek	7900	3/30	79	35.8	28.0	26.9
Hart Mountain [e]	6350	3/29	1	0.4	1.2	1.2 [m]
Idlewild Camp	5200	3/29	6	2.0	4.8	5.2
Izee Summit	5293	3/29 [j]	19	8.0	8.4	8.8
Lake Creek	5120	3/26	37	13.5	12.5	11.2
Oregon Canyon [e]	6950	3/29	3	1.2	4.5	- -
Rock Spring	5100	3/27	10	3.5	5.8	5.2
Silvies	6900	3/30	33	12.3	15.3	14.0
Snow Mountain	6300	3/29	40	17.2	10.9	14.7
Starr Ridge	5150	3/29 [j]	16	7.5	5.1	5.3
Stinking Water	4800	Not surveyed				
Trout Creek [e]	7800	3/29	22	8.8	7.2	- -
"V" Lake [e]	6600	3/29	6	2.4	7.2	- -

"The Conservation of Water begins with the Snow Survey"

Map and Index to OREGON SNOW COURSES

OWYHEE, MALHEUR WATERSHEDS (1)

Owyhee River

Number	Name		Sec.	Twp.	Rge.	Elev.
16G6	Antelope Ridge	(Ida)	20	8S	1W	5900
16G9a	Battle Creek	(Ida)	10	11S	1E	5700
15H3MA	Bear Creek	(Nev)	31	46N	58E	7800
15H2MP	Big Bend	(Nev)	30	45N	56E	6700
17G2b	Blue Mtn Pass		4	38S	42E	5290
17H2	Buckskin, Lower	(Nev)	25	45N	39E	6700
17H3	Buckskin, Upper	(Nev)	11	45N	39E	7200
16G10a	Bull Basin	(Ida)	29	12S	5W	5600
18H1	Disaster Peak	(Nev)	8	47N	34E	6500
18G2MA	Fish Creek		4	33S	33E	7900
18G3a	Folly Farm Summit		8	30S	38E	4450
15H2	Fox Creek	(Nev)	33	46N	58E	6800
15H7	Fry Canyon	(Nev)	31	43N	54E	6700
15H5	Gold Creek	(Nev)	31	45N	56E	6600
17H4	Granite Peak	(Nev)	22	44N	39E	7800
16G5a	Hyde Pasture	(Ida)	31	8S	2W	5800
16H1M	Jack Creek, Lower	(Nev)	18	42N	53E	6800
16H2	Jack Creek, Upper	(Nev)	9	42N	53E	7250
16H4	Jack Peak	(Nev)	28	42N	53E	8420
17G3a	Jordan Valley		9	30S	46E	4390
17G6a	Lookout Butte		2	40S	47E	5650
17G4a	Louse Canyon		27	40S	44E	6440
17H3	Martin Creek	(Nev)	18	44N	40E	6700
16H3	Midas	(Nev)	18	39N	46E	7200
16G7M	Mud Flat	(Ida)	34	9S	2W	5500
17G5a	Oregon Canyon		8	40S	40E	6950
17H6a	Quinn Ridge	(Nev)	9	47N	41E	6300
16G11a	Red Canyon	(Ida)	32	11S	4W	6500
15H6MP	Rodeo Flat	(Nev)	36	43N	53E	6800
15H3A	76 Creek	(Nev)	6	44N	58E	7100
16F3	Silver City	(Ida)	6	5S	3W	6400
18G1MA	Silvies		35	32S	32¾E	6900
16G1	South Mountain No.2	(Ida)	10	8S	5W	6340
16F6a	Succor Creek	(Ida)	25	3S	5W	6100
15H9MP	Taylor Canyon	(Nev)	35	39N	53E	6200
15H8	Tremewan Ranch	(Nev)	9	39N	55E	5700
16G4MA	Triangle	(Ida)	25	7S	3W	5150
18G5a	Trout Creek		10	41S	38E	7800
18G7a	"V" Lake		31	35½S	32¾E	6600

Malheur River

Number	Name	Sec.	Twp.	Rge.	Elev.
18E14	Barney Creek	16	14S	36E	5950
18E16MP	Blue Mountain Spring	21	15S	35E	5900
18F6a	Buck Pasture	21	29S	35E	5700
18E21a	Bully Creek	10	17S	37E	5300
18F7a	Call Meadows	29	20S	33E	5340
17F2a	Cottonwood-Indian	10	19S	39E	4320
18E19M	Crane Prairie	24	16S	34E	5375
18F8a	Crow Camp	Unsurveyed			
18E20	Eldoredo Pass	20	14S	38E	4600
18E26a	Flag Prairie	32	16S	36E	4750
18E18	Lake Creek	10	16S	33½E	5120
18E22a	Logan Valley	13	16S	33½E	5100
18F1	Rock Spring	23	18S	32E	5100
18F4MP	Stinking Water	33	21S	34E	4800

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS (2)

Burnt River

Number	Name	Sec.	Twp.	Rge.	Elev.
18E14	Barney Creek	16	14S	36E	5950
18E13M	Blue Mountain Summit	6	12S	36E	5098
17E1M	Dooley Mountain	32	11S	40E	5430
18E20	Eldorado Pass	20	14S	38E	4600
18E8	Gold Center	21	9S	36E	5340
18E9	Tipton	34	10S	35½E	5100

Powder River

Number	Name	Sec.	Twp.	Rge.	Elev.
18E1	Anthony Lake	18	7S	37E	7125
18E5	Bourne	33	8S	37E	5800
17E1M	Dooley Mountain	32	11S	40E	5430
18E3	Eilertson Meadows	18	8S	38E	5400
18E8	Gold Center	21	9S	36E	5340
18E6	Goodrich Lake	4	9S	36E	6775
17D12m	Ladd Summit	5	5S	39E	3730
18E23	Little Alps	10	7S	37E	6200
18D10	Summit Springs	9	6S	37E	6000
17D7	Taylor Green	3	6S	42E	5740

Pine Creek

Number	Name	Sec.	Twp.	Rge.	Elev.
17D8	Schneider Meadows	35	6S	45E	5400

Grande Ronde River

Number	Name	Sec.	Twp.	Rge.	Elev.
17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7300
18E1	Anthony Lake	18	7S	37E	7125
17D10a	Bald Mountain	14	4S	41E	6700
18D9	Beaver Reservoir	8	5S	37E	5340
18D8	County Line	28	4S	34E	4800
18D6	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24 & 25	1S	35E	4300
17D13a	Mirror Lake	34	4S	44E	8200
17D6M	Moss Spring	28	3S	41E	5850
18D7	Schoolmarm	28	4S	34E	4775
17D11a	Standley	28	2S	42E	7400
17D7	Taylor Green	3	6S	42E	5740
18D3M	Tollgate	31	4N	38E	5070
17D15a	TV Ridge	11	2S	43E	5670

Imnaha River

Number	Name	Sec.	Twp.	Rge.	Elev.
17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7000
17D14a	Big Sheep	33	4S	46E	6200

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS (3)

Umatilla River

Number	Name	Sec.	Twp.	Rge.	Elev.
19D2	Arbuckle Mountain	33	4S	29E	5400
18D14m	Athena-Weston Summit	21	4N	35E	1700
18D12M	Battle Mountain Summit	29	3S	31E	4340
18D4M	Emigrant Springs	29	1N	35E	3925
18D6	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24 & 25	1S	35E	4300
18D3M	Tollgate	32	4N	38E	5070
18D13	Walla Walla Diversion	22	6N	38E	2400

Walla Walla River

Number	Name	Sec.	Twp.	Rge.	Elev.
18D16	Blue Mountain Camp	35	4N	37E	4300
18D3M	Tollgate	32	4N	38E	5070
18D17	Weston Mountain	25	4N	35E	2700

Willow Creek

Number	Name	Sec.	Twp.	Rge.	Elev.
19D2	Arbuckle Mountain	33	4S	29E	5400

UPPER JOHN DAY WATERSHEDS (4)

Upper John Day River

Number	Name	Sec.	Twp.	Rge.	Elev.
18E1	Anthony Lake	18	7S	37E	7125
19D2	Arbuckle Mountain	33	4S	29E	5400
18D12M	Battle Mountain Summit	29	3S	31E	4340
19E2M	Beech Creek Summit	4	12S	30E	4800
18E16MP	Blue Mountain Spring	21	15S	35E	5900
18E13M	Blue Mountain Summit	6	12S	36E	5098
19E3MP	Derr	14	13S	23E	5670
18E27a	East Fork Canyon	15	15S	32E	5700
18E8	Gold Center	21	9S	36E	5340
18E24a	Indian Cr. Butte	5	15S	33E	6550
19E9P	Izee Summit	28	16S	29E	5293
18D6	Lucky Strike	28	3S	32E	5050
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
18E7	Olive Lake	14	9S	34E	6000
18D7	Schoolmarm	28	4S	34E	4775
19F1M	Snow Mountain	1	19S	26E	6300
19E7M	Sterr Ridge	20	15S	31E	5150
18E9	Tipton	34	10S	35½E	5100
18E25MP	Williams Ranch	20	15S	32E	4500

UPPER DESCHUTES, CROOKED WATERSHEDS (5)

Upper Deschutes River

Number	Name	Sec.	Twp.	Rge.	Elev.
21E11	Black Pine Spring	14	16S	9E	4600
21F8	Caldwell Ranch	30	21S	8E	4400
22F3	Cascade Summit	7	23S	6E	4880
21F7	Charlton Lake	23	21S	6E	5750
21F11	Chemult	21	27S	8E	4760
21F14	Fire Road	36	21S	11E	5050
21E6	Hogg Pass	24	13S	7½E	4755
21F4	Hungry Flat	30	18S	11E	4400
21F6	Irish-Taylor	25	20S	6E	5500
21F17	Mowich	27	25S	25E	4700
21F10	New Crescent Lake	11	24S	6E	[illegible]
21F19	New Dutchman Flat #2	21	18S	9E	[illegible]
21F13	Paulina Lake	34	21S	12E	[illegible]
21F15	Paulina Prairie	28	21S	11E	[illegible]
21F3	Tangent	28	18S	[illegible]	[illegible]
21E15	Three Creeks Butte	27	16S	[illegible]	[illegible]
21E13	Three Creek Meadows	34	16S	9E	[illegible]
22F2	Waldo Lake	15	21S	6E	5500
22F14	Willamette Pass	33	24S	5½E	[illegible]
22F15	Windigo Pass	[illegible]	25S	6E	5800

Crooked River

Number	Name	Sec.	Twp.	Rge.	Elev.
19E3MP	Derr	14	13S	23E	5670
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5700
19F1M	Snow Mountain	1	19S	26E	6300
19E4	Tamarack	8	15S	25E	4800

HOOD, MILE CREEKS LOWER DESCHUTES WATERSHEDS (6)

Hood River

Number	Name	Sec.	Twp.	Rge.	Elev.
21D5	Brooks Meadows	2	2S	10E	4300
21D25M	Cooper Spur	6	2S	10E	3490
21D1	Greenpoint Reservoir	28	2N	9E	3400
21D20	Knebal Springs	31	1S	11E	3850
21D23	Parkdale	6	1S	10E	1770
21D8	Phlox Point	6	3S	9E	5600
21D4	Red Hill	20	1S	9E	4400
21D9	Still Creek	25	3S	8½E	3700
21D7	Tilly Jane	15	2S	9E	6000
21D21	Ulrich Ranch Junction	28	1S	11E	3350
21D30	Umbrella Falls	3	3S	9E	5400
21D24	Upper Valley	20	1S	10E	2530
21D28	Switchback	28	1S	9E	3255

Mile Creeks - Mosier Creek

Number	Name	Sec.	Twp.	Rge.	Elev.
21D6	Brooks Meadows	2	2S	10E	4300
21D20	Knebal Springs	31	1S	11E	3350
21D21	Ulrich Ranch Junction	28	1S	11E	3350

Lower Deschutes River

Number	Name	Sec.	Twp.	Rge.	Elev.
21D12	Clear Lake	29	4S	9E	3500
21D22	Clear Lake Experimental	29	4S	9E	3500
21E6	Hogg Pass	24	13S	7½E	4755

LOWER COLUMBIA WATERSHEDS (7)

Sandy River

Number	Name	Sec.	Twp.	Rge.	Elev.
21D8	Phlox Point	6	3S	9E	5600
21D9	Still Creek	25	3S	8½E	3700

WILLAMETTE WATERSHEDS (8)

Clackamas River

Number	Name	Sec.	Twp.	Rge.	Elev.
21D15	Big Bottom	25	6S	7E	2118
21D13	Clackamas Lake	35	5S	8½E	3400
21D12	Clear Lake	29	4S	9E	3500
21D16	Lake Harriet	4	6S	7E	2045
21D14	Peavine Ridge	14 & 15	6S	7E	3500
21D8	Phlox Point	6	3S	9E	5600
21D9	Still Creek	25	3S	8½E	3700
21D17	Timothy Lake	26	5S	8E	3295

Santiam River

Number	Name	Sec.	Twp.	Rge.	Elev.
22E1	Detroit (town)	1	10S	5E	1610
22E2	Detroit Dam	7	10S	5E	1580
21E6	Hogg Pass	24	13S	7½E	4755
21E4	Marion Forks	[illegible]	11S	7E	2730
22E3	Mill City	[illegible]	9S	3E	826
21E5	Santiam Junction	14	13S	7E	3700
21E3	Whitewater Bridge	[illegible]	10S	7E	2175

McKenzie River

Number	Name	Sec.	Twp.	Rge.	Elev.
21E8	Dead Horse Grade	[illegible]	16S	7E	[illegible]
22E4	Lost Creek Ranch	24	16S	6E	1956
21E7	McKenzie	35	15S	7½E	3800
22E5	McKenzie Bridge	13	16S	5E	1372
22E6	Vida	2	16S	2E	850
21E9	White Branch Slide	[illegible]	16S	7E	[illegible]

Middle Fork Willamette River

Number	Name	Sec.	Twp.	Rge.	Elev.
22F3	Cascade Summit	[illegible]	23S	6E	4880
22F6	McCredie Springs	26	21S	4E	2120
22F8	Meridian Dam	11	19S	1W	[illegible]
22F7	Oakridge	16	21S	3E	1310
22F5	Railroad Overpass	27	22S	5E	[illegible]
22F4	Salt Creek Falls	33	22S	6E	4000
22F2	Waldo Lake	15	21S	6E	5500
22F14	Willamette Pass	33	24S	5½E	5600

Coast Fork Willamette River

Number	Name	Sec.	Twp.	Rge.	Elev.
22F9	Champion	12	23S	1E	4500
22F10	Golden Curry Creek	1	23S	1E	[illegible]
22F13	Layng Creek R. S.	11	21S	1E	1200
22F12	Lund Park	22	22S	1E	1740
22F11	Weaver Creek	35	22S	1E	2240

Mary's River

Number	Name	Sec.	Twp.	Rge.	Elev.
23E1	Mary's Peak	21	12S	[illegible]	[illegible]

ROGUE, UMPQUA WATERSHEDS (9)

Rogue River

Number	Name	Sec.	Twp.	Rge.	Elev.
23G2	Althouse	17	41S	7W	4530
22G6	Annie Spring	19	31S	6E	6018
22G28	Beaver Dam Creek	1	38S	4E	5100
22G21	Big Red Mountain	11	40S	1W	6500
22G13	Billie Creek Divide	10	36S	5E	5300
22G27	Deadwood Junction	8	38S	4E	4600
22F19	Diamond-Crater Summit	14	28S	6E	5800
22G14	Fish Lake	1	37S	4E	[illegible]
22G12	Fourmile Lake	9	36S	5E	[illegible]
23G3	Grayback Peak	9	40S	4W	[illegible]
22G17	Hobart Lake	17	40S	1E	[illegible]
22G26	Howard Prairie	32	38S	4E	4500
22G16	Hyatt Prairie Reservoir	15	39S	3E	5000
22G22	Little Red Mountain	25	40S	1W	6500
[illegible]	Page Mountain	8	41S	7W	4045
[illegible]	Park Headquarters	8	31S	6E	6450
[illegible]	Rye Spring Spur	11	36S	4E	[illegible]
22G10	Seven Lakes No. 1	1	32S	5E	[illegible]
22G11	Seven Lakes No. 2	26	33S	5E	[illegible]
[illegible]	Silver Burn	13	36S	4E	[illegible]
22G20	Siskiyou Summit	17	40S	2E	[illegible]
[illegible]	South Fork Canal	12	39S	1E	[illegible]
22G1	Whaleback	1	31S	3E	[illegible]

Umpqua River

Number	Name	Sec.	Twp.	Rge.	Elev.
22F9	Champion	12	23S	1E	4500
22F18	Diamond Lake	[illegible]	27S	6E	5315
23G7	Eden Valley Summit	10	32S	10W	[illegible]
22F16	North Umpqua	19	26S	[illegible]	4215
22F23	Red Butte No. 1	16	27S	2W	4560
22F24	Red Butte No. 2	30	27S	1W	4000
22F25	Red Butte No. 3	30	27S	1W	3500
22F26	Red Butte No. 4	16	27S	1W	[illegible]
22F27	Red Butte No. 5	20	27S	1W	2500
22F28	Red Butte No. 6	17	27S	1W	2000
22F17	Trap Creek	1	[illegible]	4E	3800
22G1	Whaleback	1	31S	2E	5140
22F15	Windigo Pass	[illegible]	[illegible]	[illegible]	[illegible]

KLAMATH WATERSHEDS (10)

Klamath River

Number	Name	Sec.	Twp.	Rge.	Elev.
22G6	Annie Spring	[illegible]	31S	6E	6018
22G13	Billie Creek Divide	[illegible]	[illegible]	[illegible]	5300
21G5	Bly Mountain	15 & 22	[illegible]	11E	[illegible]
21F11	Chemult	21	27S	8E	4760
22G24	Cold Springs Camp	12	[illegible]	5E	6100
20G12a	Crazyman Flat	1	[illegible]	[illegible]	6100
20H2a	Crowler Flat (Cal)	[illegible]	47N	11E	[illegible]
22F19	Diamond-Crater Summit	14	[illegible]	6E	5800
21F18	Diamond Lake Jct. (97)	1	[illegible]	7E	4600
21G6a	Dog Hollow	1	40S	14E	[illegible]
20G14a	Finley Corrals	11	[illegible]	16E	6000
22G12	Fourmile Lake	[illegible]	[illegible]	5E	[illegible]
21G4	Gerber	12	[illegible]	13E	4850
22G16	Hyatt Prairie Reservoir	15	[illegible]	3E	[illegible]
22G26	Howard Prairie	32	[illegible]	4E	4500
22G15	Lake of the Woods	11	37S	5E	[illegible]
22G5	Park Headquarters	8	31S	6E	[illegible]
22G25	Pelican Guard Station	9	[illegible]	[illegible]	4150
20G6MP	Quartz Mountain	2	[illegible]	[illegible]	[illegible]
22G10	Seven Lakes No. 1	3	[illegible]	5E	[illegible]
22G11	Seven Lakes No. 2	26	33S	5E	[illegible]
20H1a	State Line (Cal)	21	48N	11E	[illegible]
[illegible]	Strawberry	4	40S	16E	[illegible]
20G2AP	Summer Rim	15	[illegible]	16E	[illegible]
21G2	Sun Mountain	22	[illegible]	7½E	[illegible]
20G13a	Sycan Flat	25	33S	14E	5500
21G3	Taylor Butte	16	33S	11E	5100

Pacific Power and Light Company's Snow Stations

Number	Name	Sec.	Twp.	Rge.	Elev.
1	Beatty (PP&L)	22	36S	12E	4300
10	Bly 101 Ranch (PP&L)	22	35S	14E	4800
[illegible]	Chiloquin (PP&L)	34	34S	7E	4187
4	Crystal (PP&L)	26	34S	6E	4200
[illegible]	Fort Klamath (PP&L)	22	33S	7½E	4150
[illegible]	Kirk (PP&L)	1	33S	7E	[illegible]
9	Quartz Mountain (PP&L)	11	[illegible]	10E	[illegible]
8	Harriman Lodge (PP&L)	1	36S	6E	4200
[illegible]	Yamsay (PP&L)	20	31S	11E	4600

LAKE COUNTY, GOOSE LAKE WATERSHEDS (11)

Goose Lake

Number	Name		Sec.	Twp.	Rge.	Elev.
20G15a	Bear Flat Meadow		27	[illegible]	19E	5000
[illegible]	Camas Creek		5	[illegible]	21E	5750
20G11a	Cox Flat		16	37S	18E	5750
20G16a	Crane Mountain		11	40S	21E	6020
20H2a	Crowler Flat	(Cal)	10	47N	11E	5200
20H3a	Dismal Swamp	(Cal)	11	48N	16E	7000
[illegible]	Patton Meadow		28	[illegible]	18E	6000
[illegible]	Quartz Mountain		2	[illegible]	16E	[illegible]
20H1a	State Line	(Cal)	21	48N	11E	5750
[illegible]	Strawberry		4	40S	16E	5600

Abert Lake

Number	Name	Sec.	Twp.	Rge.	Elev.
20G15a	Bear Flat Meadow	27	[illegible]	19E	5000
20G11a	Cox Flat	16	37S	18E	5750
20G14a	Finley Corrals	11	[illegible]	16E	[illegible]
[illegible]	Mill Creek	1	[illegible]	17E	[illegible]
[illegible]	Quartz Mountain	2	[illegible]	16E	[illegible]
20G10a	Sherman Valley	15	[illegible]	21E	[illegible]

Summer Lake

Number	Name	Sec.	Twp.	Rge.	Elev.
[illegible]	Summer Rim	15	[illegible]	16E	7200

Silver Lake

Number	Name	Sec.	Twp.	Rge.	Elev.
[illegible]	Silver Creek	25 & 26	[illegible]	13E	4900
[illegible]	Sycan Flat	25	[illegible]	14E	5500

Warner Lake

Number	Name		Sec.	Twp.	Rge.	Elev.
[illegible]	Camas Creek		5	[illegible]	21E	5750
[illegible]	Crane Mountain		11	40S	21E	6020
[illegible]	Dismal Swamp	(Cal)	11	48N	22E	[illegible]
[illegible]	Hart Mountain		1	[illegible]	[illegible]	[illegible]
[illegible]	Sherman Valley		15	[illegible]	21E	[illegible]

Guano Lake

Number	Name		Sec.	Twp.	Rge.	Elev.
[illegible]	Bald Mountain	(Nev)	17	45N	21E	[illegible]
[illegible]	Hart Mountain		1	[illegible]	[illegible]	[illegible]
[illegible]	Little Bally Mt	(Nev)	[illegible]	[illegible]	19E	[illegible]

HARNEY BASIN WATERSHED (11)

Silvies River - Silver Creek

Number	Name	Sec.	Twp.	Rge.	Elev.
[illegible]	Call Meadows	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Delintment Lake	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Emigrant Divide	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Idlewild Camp	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Izee Summit	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Rock Spring	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Snow Mountain	1	[illegible]	[illegible]	[illegible]
[illegible]	Sterr Ridge	[illegible]	[illegible]	[illegible]	5150
[illegible]	Stinking Water	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Willow-Field	[illegible]	[illegible]	[illegible]	[illegible]

Donner Und Blitzen River

Number	Name		Sec.	Twp.	Rge.	Elev.
[illegible]	Buck Pasture		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Fish Creek		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Hart Mountain		1	[illegible]	[illegible]	[illegible]
[illegible]	Silvies		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	"V" Lake		[illegible]	[illegible]	[illegible]	[illegible]

Trout and Whitehorse Creeks

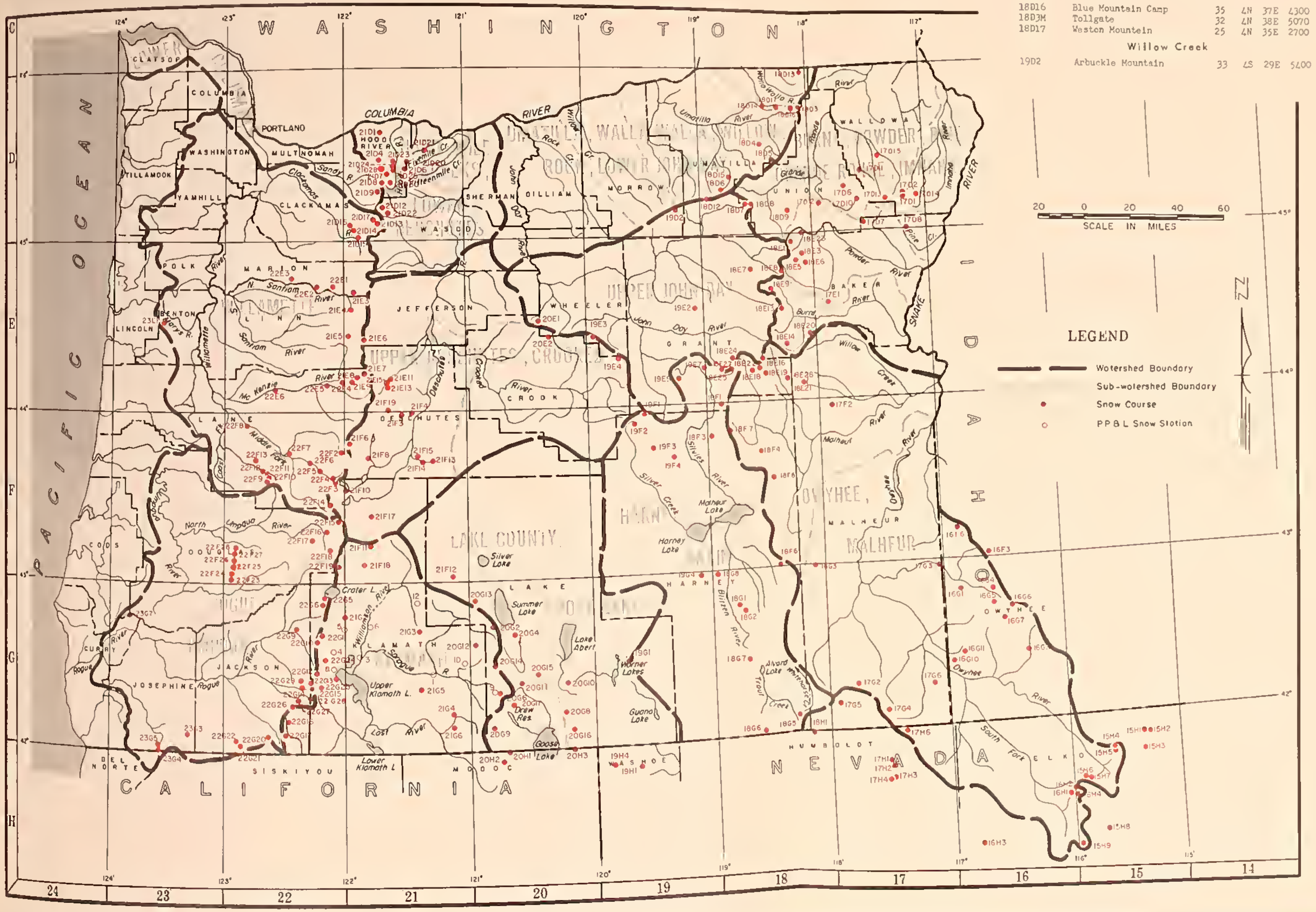
Number	Name		Sec.	Twp.	Rge.	Elev.
[illegible]	Fenlo Creek		[illegible]	[illegible]	[illegible]	[illegible]
18H1	Disaster Peak	(Nev)	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Oregon Canyon		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trout Creek		10	[illegible]	[illegible]	[illegible]

Harney Lake

Number	Name	Sec.	Twp.	Rge.	Elev.
[illegible]	[illegible] Lake	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Foster Flat	15	[illegible]	[illegible]	[illegible]

KEY

[illegible]	snow course only
[illegible]	snow course and soil moisture
[illegible]	snow course, soil moisture and aerial marker
[illegible]	snow course and aerial marker
[illegible]	soil moisture only
[illegible]	aerial marker only
[illegible]	snow course and precipitation gage



U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE M-1874

7-S-19101-0

The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE
- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY
- Douglas County Water Resources Survey

FEDERAL
- Department of Agriculture
  - Cooperative Extension Service
  - Forest Service
  - Soil Conservation Service
- Department of Commerce
  - Weather Bureau
- Department of the Interior
  - Bonneville Power Administration
  - Bureau of Land Management
  - Bureau of Reclamation
  - Fish and Wildlife Service
  - Geological Survey
  - National Park Service
- Department of National Defense
  - Corps of Army Engineers

PUBLIC UTILITIES
- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES
- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS
- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale-Oregon Irrigation District
- Warmsprings Irrigation District

PRIVATE ORGANIZATIONS
- Amalgamated Sugar Company
- The Crag Rats, Hood River, Oregon

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE

FIRST CLASS MAIL

FEDERAL - STATE - PRIVATE

COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation , navigation , mining and industry

"The Conservation of Water begins with the Snow Survey"